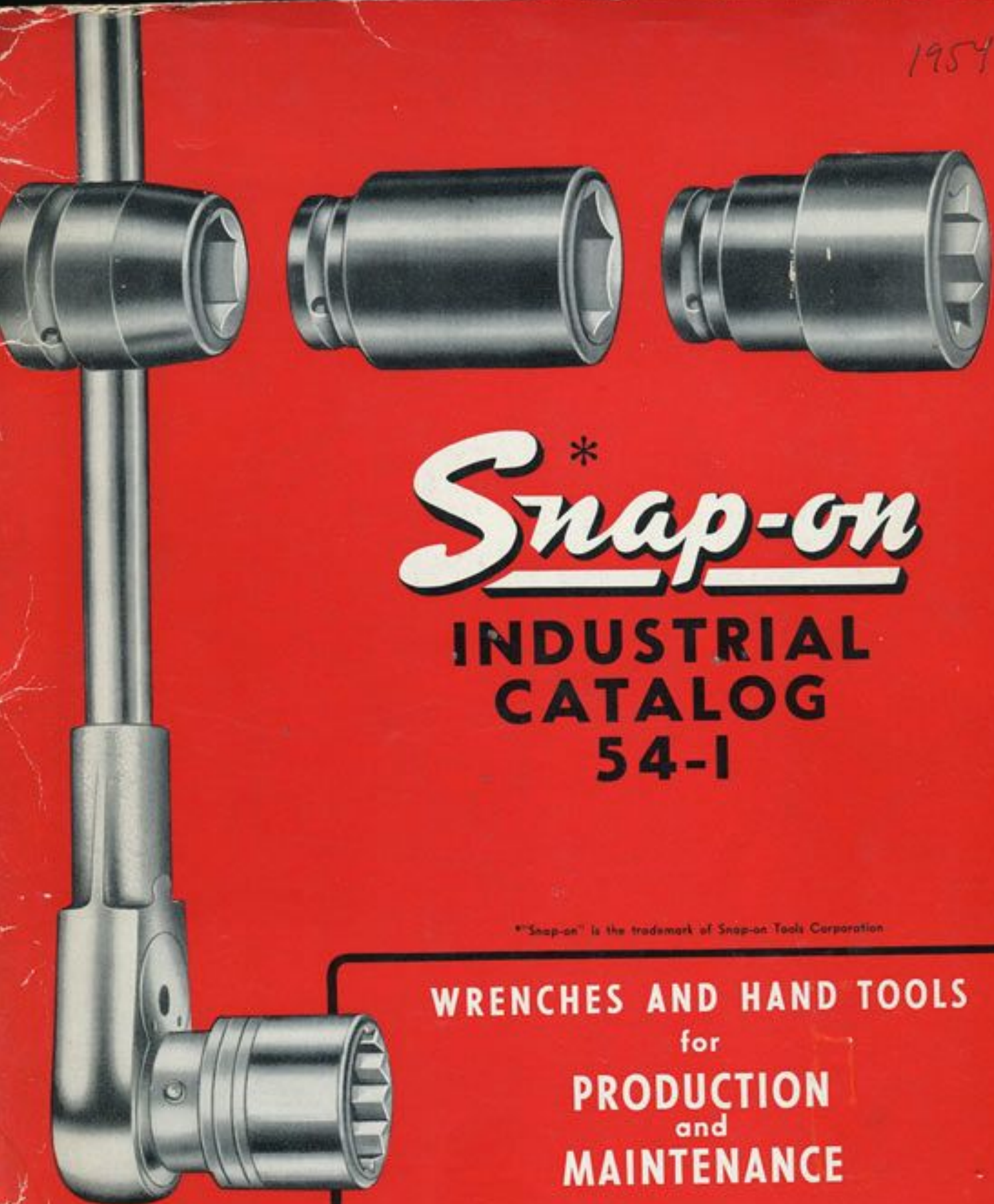


1954



Snap-on**

**INDUSTRIAL
CATALOG
54-1**

*"Snap-on" is the trademark of Snap-on Tools Corporation

**WRENCHES AND HAND TOOLS
for
PRODUCTION
and
MAINTENANCE**

SNAP-ON TOOLS CORPORATION, Kenosha, Wis.

DRILL TABLE

MILLIMETER, NUMBER AND FRACTIONAL DRILLS

| DEC. EQUIV. | MILLI-METER | NUM-BER | FRACTIONAL | DEC. EQUIV. | MILLI-METER | NUM-BER | FRACTIONAL | DEC. EQUIV. | MILLI-METER | NUM-BER | FRACTIONAL | DEC. EQUIV. | MILLI-METER | NUM-BER | FRACTIONAL | DEC. EQUIV. | MILLI-METER | FRACTIONAL |
|-------------|-------------|---------|------------|-------------|-------------|---------|------------|-------------|-------------|---------|------------|-------------|-------------|---------|------------|-------------|-------------|------------|
| .0039 | .1 | | | .0689 | 1.75 | 50 | | .1570 | 4.0 | 22 | | .2677 | 6.8 | | | .4219 | 11.0 | 27/64 |
| .0059 | .15 | | | .0700 | 1.8 | | | .1575 | | | | .2716 | 6.9 | | | .4330 | | |
| .0079 | .2 | | | .0709 | 1.8 | | | .1590 | | 21 | | .2720 | | I | | .4375 | | 7/16 |
| .0098 | .25 | | | .0728 | 1.85 | | | .1610 | | 20 | | .2756 | 7.0 | | | .4528 | 11.5 | |
| .0118 | .3 | | | .0739 | | 49 | | .1614 | 4.1 | | | .2770 | | J | | .4531 | | 29/64 |
| .0135 | | 80 | | .0748 | 1.9 | | | .1654 | 4.2 | | | .2795 | 7.1 | | | .4687 | | 15/32 |
| .0138 | .35 | | | .0760 | | 48 | | .1660 | | 19 | | .2811 | | K | | .4724 | 12.0 | |
| .0145 | | 79 | | .0767 | 1.95 | | | .1673 | 4.25 | | | .2812 | | | 9/32 | .4843 | | 31/64 |
| .0156 | | | 1/64 | .0781 | | | 5/64 | .1693 | 4.3 | | | .2835 | 7.2 | | | .4921 | 12.5 | |
| .0157 | .4 | | | .0785 | | 47 | | .1695 | | 18 | | .2854 | 7.25 | | | .5000 | | 1/2 |
| .0160 | | 78 | | .0787 | 2.0 | | | .1719 | | | 11/64 | .2874 | 7.3 | | | .5118 | 13.0 | |
| .0177 | .45 | | | .0807 | 2.05 | | | .1730 | | 17 | | .2900 | | L | | .5156 | | 33/64 |
| .0180 | | 77 | | .0810 | | 46 | | .1732 | 4.4 | | | .2913 | 7.4 | | | .5312 | | 17/32 |
| .0197 | .5 | | | .0820 | | 45 | | .1770 | | 16 | | .2950 | | M | | .5315 | 13.5 | |
| .0200 | | 76 | | .0827 | 2.1 | | | .1771 | 4.5 | | | .2953 | 7.5 | | | .5469 | | 35/64 |
| .0210 | | 75 | | .0846 | 2.15 | | | .1800 | | 15 | | .2968 | | | 19/64 | .5512 | 14.0 | |
| .0217 | .55 | | | .0860 | | 44 | | .1811 | 4.6 | | | .2992 | 7.6 | | | .5625 | | 9/16 |
| .0225 | | 74 | | .0866 | 2.2 | | | .1820 | | 14 | | .3020 | | N | | .5709 | 14.5 | |
| .0236 | .6 | | | .0885 | 2.25 | | | .1850 | 4.7 | 13 | | .3031 | 7.7 | | | .5781 | | 37/64 |
| .0240 | | 73 | | .0890 | | 43 | | .1870 | 4.75 | | 3/16 | .3051 | 7.75 | | | .5906 | 15.0 | |
| .0250 | | 72 | | .0905 | 2.3 | | | .1875 | | | | .3071 | 7.8 | | | .5937 | | 19/32 |
| .0256 | .65 | | | .0925 | 2.35 | | | .1890 | 4.8 | 12 | | .3110 | 7.9 | | | .6094 | | 39/64 |
| .0260 | | 71 | | .0935 | | 42 | | .1910 | | 11 | | .3125 | | | 5/16 | .6102 | 15.5 | |
| .0280 | | 70 | | .0937 | | | 3/32 | .1929 | 4.9 | | | .3150 | 8.0 | | | .6250 | | 5/8 |
| .0276 | .7 | | | .0945 | 2.4 | | | .1935 | | 10 | | .3160 | | O | | .6299 | 16.0 | |
| .0292 | | 69 | | .0960 | | 41 | | .1960 | | 9 | | .3189 | 8.1 | | | .6406 | | 41/64 |
| .0295 | .75 | | | .0964 | 2.45 | | | .1968 | 5.0 | | | .3228 | 8.2 | | | .6496 | 16.5 | |
| .0310 | | 68 | | .0980 | | 40 | | .1990 | | 8 | | .3230 | | P | | .6562 | | 21/32 |
| .0312 | | | 1/32 | .0984 | 2.5 | | | .2008 | 5.1 | | | .3248 | 8.25 | | | .6693 | 17.0 | |
| .0315 | .8 | | | .0995 | | 39 | | .2010 | | 7 | | .3268 | 8.3 | | | .6719 | | 43/64 |
| .0320 | | 67 | | .1015 | | 38 | | .2031 | | | 13/64 | .3281 | | | 21/64 | .6875 | | 11/16 |
| .0330 | | 66 | | .1024 | 2.6 | | | .2040 | | 6 | | .3307 | 8.4 | | | .6890 | 17.5 | |
| .0335 | .85 | | | .1040 | | 37 | | .2047 | 5.2 | | | .3320 | | Q | | .7031 | | 45/64 |
| .0350 | | 65 | | .1063 | 2.7 | | | .2055 | | 5 | | .3346 | 8.5 | | | .7087 | 18.0 | |
| .0354 | .9 | | | .1065 | | 36 | | .2067 | 5.25 | | | .3386 | 8.6 | | | .7187 | | 23/32 |
| .0360 | | 64 | | .1082 | 2.75 | | | .2086 | 5.3 | | | .3390 | | R | | .7283 | 18.5 | |
| .0370 | | 63 | | .1094 | | | 7/64 | .2090 | | 4 | | .3425 | 8.7 | | | .7344 | | 47/64 |
| .0374 | .95 | | | .1100 | | 35 | | .2126 | 5.4 | | | .3437 | | | 11/32 | .7480 | 19.0 | |
| .0380 | | 62 | | .1102 | 2.8 | | | .2130 | | 3 | | .3445 | 8.75 | | | .7500 | | 3/4 |
| .0390 | | 61 | | .1110 | | 34 | | .2165 | 5.5 | | | .3465 | 8.8 | | | .7656 | | 49/64 |
| .0394 | 1.0 | | | .1130 | | 33 | | .2187 | | | 7/32 | .3480 | | S | | .7677 | 19.5 | |
| .0400 | | 60 | | .1141 | 2.9 | | | .2205 | 5.6 | | | .3504 | 8.9 | | | .7812 | | 25/32 |
| .0410 | | 59 | | .1160 | | 32 | | .2210 | | 2 | | .3543 | 9.0 | | | .7874 | 20.0 | |
| .0413 | 1.05 | | | .1181 | 3.0 | | | .2244 | 5.7 | | | .3580 | | T | | .7969 | | 51/64 |
| .0420 | | 58 | | .1200 | | 31 | | .2263 | 5.75 | | | .3583 | 9.1 | | | .8071 | 20.5 | |
| .0430 | | 57 | | .1220 | 3.1 | | | .2280 | | 1 | | .3594 | | | 23/64 | .8125 | | 13/16 |
| .0433 | 1.1 | | | .1250 | | | 1/8 | .2283 | 5.8 | | | .3622 | 9.2 | | | .8268 | 21.0 | |
| .0452 | 1.15 | | | .1260 | 3.2 | | | .2323 | 5.9 | | | .3641 | 9.25 | | | .8281 | | 53/64 |
| .0465 | | 56 | | .1279 | 3.25 | | | .2340 | | A | | .3661 | 9.3 | | | .8437 | | 27/32 |
| .0469 | | | 3/64 | .1285 | | 30 | | .2344 | | | 15/64 | .3680 | | U | | .8465 | 21.5 | |
| .0472 | 1.2 | | | .1299 | 3.3 | | | .2362 | 6.0 | | | .3701 | 9.4 | | | .8594 | | 55/64 |
| .0492 | 1.25 | | | .1338 | 3.4 | | | .2380 | | B | | .3740 | 9.5 | | | .8661 | 22.0 | |
| .0512 | 1.3 | | | .1360 | | 29 | | .2401 | 6.1 | | | .3750 | | | 3/8 | .8750 | | 7/8 |
| .0520 | | 55 | | .1378 | 3.5 | | | .2420 | | C | | .3770 | | V | | .8858 | 22.5 | |
| .0531 | 1.35 | | | .1405 | | 28 | | .2441 | 6.2 | | | .3780 | 9.6 | | | .8906 | | 57/64 |
| .0550 | | 54 | | .1406 | | | 9/64 | .2460 | 6.25 | D | | .3819 | 9.7 | | | .9055 | 23.0 | |
| .0551 | 1.4 | | | .1417 | 3.6 | | | .2480 | 6.3 | | | .3838 | 9.75 | | | .9062 | | 29/32 |
| .0570 | 1.45 | | | .1440 | | 27 | | .2500 | | E | 1/4 | .3858 | 9.8 | | | .9219 | | 59/64 |
| .0591 | 1.5 | | | .1457 | 3.7 | | | .2520 | 6.4 | | | .3860 | | W | | .9252 | 23.5 | |
| .0595 | | 53 | | .1470 | | 26 | | .2539 | 6.5 | | | .3898 | 9.9 | | | .9375 | | 15/16 |
| .0610 | 1.55 | | | .1476 | 3.75 | | | .2570 | | F | | .3906 | | | 25/64 | .9449 | 24.0 | |
| .0625 | | | 1/16 | .1495 | | 25 | | .2598 | 6.6 | | | .3937 | 10.0 | | | .9531 | | 61/64 |
| .0629 | 1.6 | | | .1496 | 3.8 | | | .2610 | | G | | .3970 | | X | | .9646 | 24.5 | |
| .0635 | | 52 | | .1520 | | 24 | | .2618 | 6.7 | | | .4040 | | Y | | .9687 | | 31/32 |
| .0649 | 1.65 | | | .1535 | 3.9 | | | .2656 | | | 17/64 | .4062 | | | 13/32 | .9843 | 25.0 | |
| .0669 | 1.7 | | | .1540 | | 23 | | .2657 | 6.75 | | | .4130 | | Z | | .9844 | | 63/64 |
| .0670 | | 51 | | .1562 | | | 5/32 | .2660 | | H | | .4134 | 10.5 | | | 1.0000 | | 1 |

TAP DRILL SIZES

NATIONAL SCREW THREADS COMMISSION SIZES

| THREAD | DRILL | THREAD | DRILL | THREAD | DRILL | THREAD | DRILL | THREAD | DRILL |
|--------|--------|---------|--------|-------------|---------|--------------|---------|---------------|---------|
| #0-80 | 3/64 | #12-28 | No. 15 | 7/8-14 | 13/16 | TAPER PIPE | | STRAIGHT PIPE | |
| #1-64 | No. 53 | 1/4-20 | No. 8 | 1-8 | 7/8 | 1/8-27 | 21/64 | 1/8-27 | 5 |
| #1-72 | No. 53 | 1/4-28 | No. 3 | 1-14 | 15/16 | 1/4-18 | 7/16 | 1/4-18 | 29/64 |
| #2-56 | No. 51 | 5/16-18 | F | 1-1/8-7 | 63/64 | 3/8-18 | 9/16 | 3/8-18 | 19/32 |
| #2-64 | No. 50 | 5/16-24 | I | 1-1/8-12 | 1-3/64 | 1/2-14 | 45/64 | 1/2-14 | 47/64 |
| #3-48 | 5/64 | 3/8-16 | 5/16 | 1-1/4-7 | 1-7/64 | 3/4-14 | 29/32 | 3/4-14 | 15/16 |
| #3-56 | No. 46 | 3/8-24 | O | 1-1/4-12 | 1-11/64 | 1-11-1/2 | 1-9/64 | 1-11-1/2 | 1-3/16 |
| #4-40 | No. 43 | 7/16-14 | U | 1-1/2-6 | 1-11/32 | 1-1/4-11-1/2 | 1-31/64 | 1-1/4-11-1/2 | 1-33/64 |
| #4-48 | No. 42 | 7/16-20 | W | 1-1/2-12 | 1-27/64 | 1-1/2-11-1/2 | 1-23/32 | 1-1/2-11-1/2 | 1-3/4 |
| #5-40 | No. 39 | 1/2-13 | 27/64 | 1-3/4-5 | 1-35/64 | 2-1/2-8 | 2-5/8 | 2-1/2-8 | 2-21/32 |
| #5-44 | No. 37 | 1/2-20 | 29/64 | 1-3/4-12 | 1-43/64 | 3-8 | 3-1/4 | 3-8 | 3-9/32 |
| #6-32 | No. 36 | 9/16-12 | 31/64 | 2-4-1/2 | 1-25/32 | 3-1/2-8 | 3-3/4 | 3-1/2-8 | 3-25/32 |
| #6-40 | No. 33 | 9/16-18 | 33/64 | 2-12 | 1-59/64 | 4-8 | 4-1/4 | 4-8 | 4-9/32 |
| #8-32 | No. 29 | 5/8-11 | 17/32 | 2-1/4-4-1/2 | 2-1/32 | 4-1/2-8 | 4-3/4 | 4-1/2-8 | 4-25/32 |
| #8-36 | No. 29 | 5/8-18 | 37/64 | 2-1/2-4 | 2-1/4 | 5-8 | 5-9/32 | 5-8 | 5-11/32 |
| #10-24 | No. 25 | 3/4-10 | 21/32 | 2-3/4-4 | 2-1/2 | 6-8 | 6-11/32 | 6-8 | 6-13/32 |
| #10-32 | No. 21 | 3/4-16 | 11/16 | 3-4 | 2-3/4 | | | | |
| #12-24 | No. 17 | 7/8-9 | 49/64 | | | | | | |

*** Snap-on**

INDUSTRIAL

WRENCHES AND HAND TOOLS

A CONDENSED INDEX

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DEPARTMENT

Register No.

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Snap-on INDUSTRIAL TOOLS

ARE SOLD DIRECTLY TO INDUSTRIAL TOOL BUYERS
THROUGH CONVENIENTLY LOCATED FACTORY BRANCHES



FROM
FACTORY

TO
BRANCH

TO
YOU



BRANCH SALES OFFICES IN 46 PRINCIPAL CITIES
PROVIDE *Snap-on* SERVICE
TO ALL IMPORTANT INDUSTRIAL AREAS

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1209 E. 25th St.
Phone: Hopkins 7-4666

BOSTON 35, MASS.
116 N. Beacon St.
(Brighton District)
Phone: ST 2-2230, AL 4-6422

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Phone: 3-8831

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Phone: Riverside 1611

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Phone: Trinity 5-6455

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Phone: 23889

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Phone: 5790

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Phone: 86-6665

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Phone: Capitol 5-5405

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Phone: Lincoln 4351

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Phone: 4-4460, 4-4469

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Phone: Westport 0364, 0365

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465 Nightingale Ave.
Phone: 4-7307, 4-7308

LOS ANGELES 17, CALIF.
1717 W. 6th St.
Phone: Dunkirk 83445

Industrial and Railroad Dept.

2905 - 60th St., Kenosha, Wis.

Phone: Olympic 24806

Snap-on INDUSTRIAL SERVICE

IS RENDERED BY PERSONNEL WITH SPECIALIZED
KNOWLEDGE OF INDUSTRIAL TOOL PROBLEMS

When you want tool service—fast—phone your nearest SNAP-ON factory branch. You'll talk to a tool man when you get the SNAP-ON branch on the wire . . . he'll understand your wants clearly and will get needed tools to you—fast. If you prefer, he will have a SNAP-ON industrial tool specialist visit you without delay to help you select the most efficient industrial tools for your needs. To meet tool emergencies—as well as year-'round normal tool needs of industry—SNAP-ON maintains tool stocks at each of the branch offices listed below. For 34 years, plants—large and small—have used and endorsed this "time-saving service to buy time-saving tools."

***Snap-on* TOOLS ARE AVAILABLE ONLY FROM
BRANCH OFFICES AND TRAINED PERSONNEL
CALLING DIRECTLY ON INDUSTRIAL ACCOUNTS**

GENERAL OFFICES, Kenosha, Wis.

MEXICO CITY
4a Calle de Jalapa 102
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MIAMI, FLA.
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Phone: 80-1146

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2600 W. State St.
Phone: West 3-3116, 17

MINNEAPOLIS 3, MINN.
1218 Harmon Place
Phone: Geneva 5367, ZE 2122

MONCTON, N. B.
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Phone: 24159

MONTREAL 16, QUEBEC
190 Rockland Road
Phone: Regent 3-7179, 70

NEWARK 6, N. J.
823 Sandford Ave.
Phone: Essex 5-3197, 98

NEW ORLEANS 13, LA.
1040 Comp St.
Phone: Raymond 2418

NEW YORK 67, N. Y.
2807 White Plains Road
Phone: Tulip 2-6868

OKLAHOMA CITY 3, OKLA.
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Phone: Forest 5-4975

OMAHA 11, NEBR.
3601 N. 24th St.
Phone: PL 3116

PHILADELPHIA 30, PA.
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Phone: Poplar 5-7400, 01

PITTSBURGH 8, PA.
7007 Kelly St.
Phone: Monroeville 1-7600

REGINA, SASK.
2070 Albert St.
Phone: 4103

RICHMOND 20, VA.
1617 West Broad St.
Phone: 5-8115

SAN FRANCISCO 2, CALIF.
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Phone: Underhill 3-3195

SANTURCE, PUERTO RICO
Fernandez Juncos Ave., 1064

SEATTLE 22, WASH.
1501 Olive Way
Phone: Capitol 3646

ST. LOUIS 3, MO.
2647 Washington Blvd.
Phone: Newstead 1150, 51

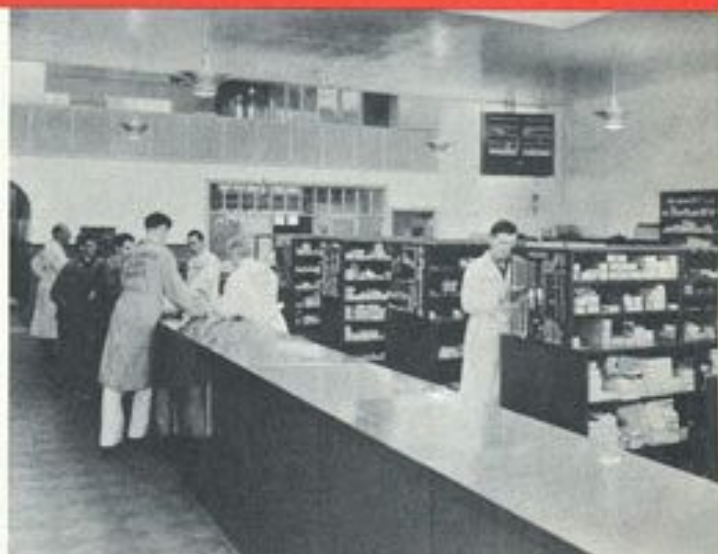
SYRACUSE 3, N. Y.
323 Irving Ave.
Phone: 75-2224

TOLEDO 6, OHIO
2932 Monroe St.
Phone: Adams 1026

TORONTO 16, ONT.
10 Bermondsey Road
Phone: Plymouth 5-3004, 5-3924

VANCOUVER 5, B. C.
1043 Davie St.
Phone: Tatlow 1561

WINNIPEG, MANIT.
1699 Portage Ave.
Phone: 6-5093



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International Division

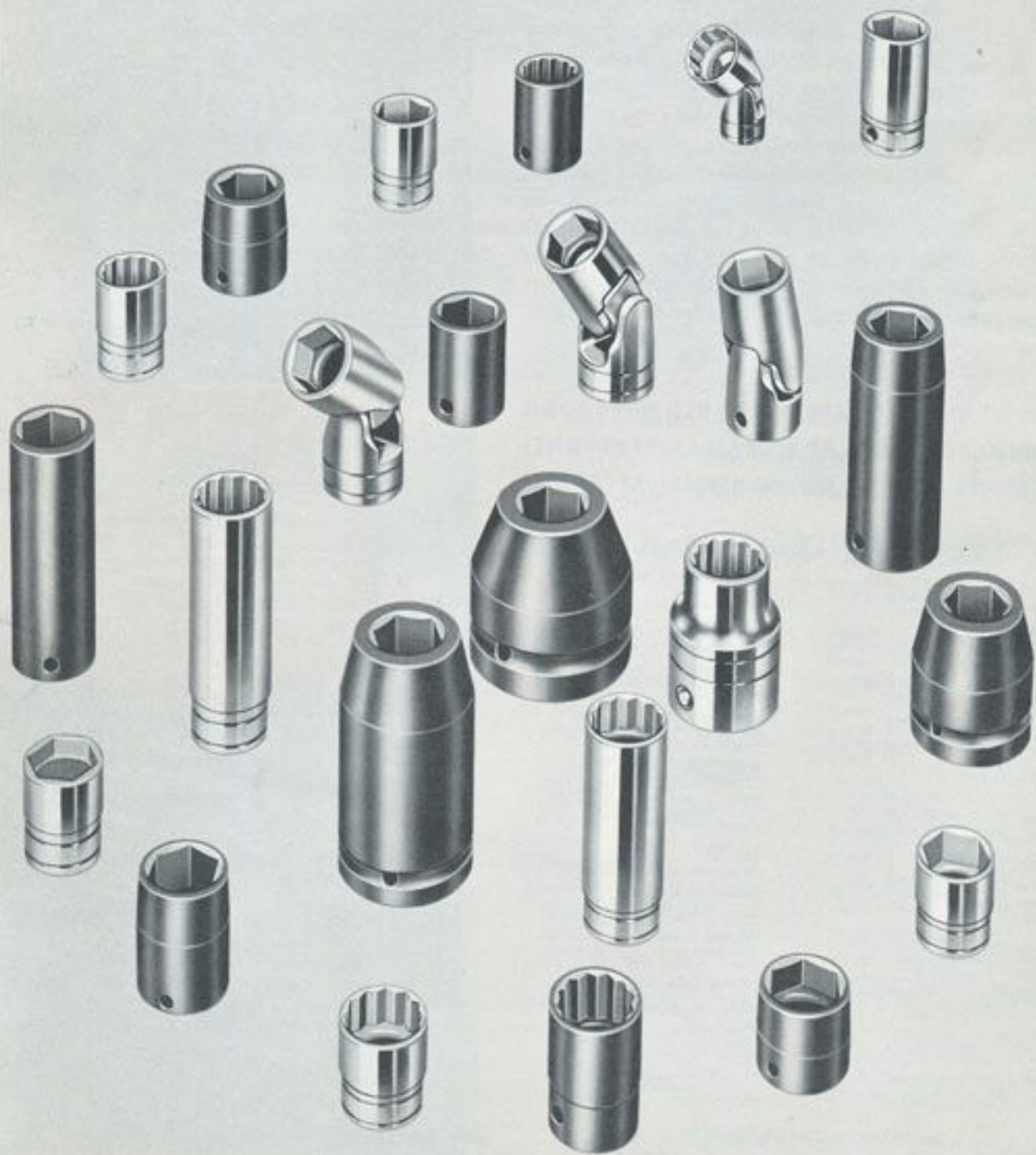
8028 - 28th Ave., Kenosha, Wis., U.S.A.

Cable Address: "Snapon." All Codes

FOR POWER AND HAND ASSEMBLY OPERATIONS

Snap-on SOCKET WRENCHES

PROVIDE A TYPE TO BEST SUIT EVERY INDUSTRIAL JOB
EACH OF THE 24 SOCKETS SHOWN BELOW IS A 3/4" HEX WRENCH
YET EACH IS DIFFERENT AND BEST SUITED FOR SPECIFIC OPERATIONS

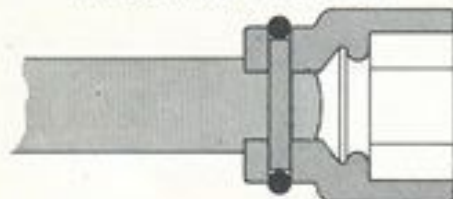


***Snap-on* INDUSTRIAL SOCKETS**

**ARE SPECIALLY ENGINEERED AND HEAT TREATED FOR USE
ON POWERED CLUTCH-TYPE AND IMPACT-TYPE NUT SETTERS**

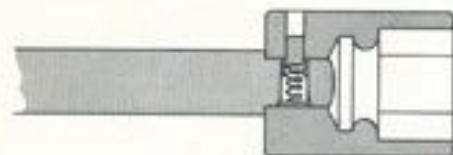
**SNAP-ON sockets are attached
to shanks or handles by means
of these holding devices**

IMPACT-PIN AND RING



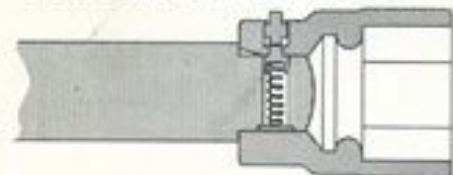
A steel pin is inserted through both sides of the socket wall and the male square drive of shank on impact wrench. Rubber band holds pin in place. Used on Impact type units.

POWER-LOCKING BUTTON



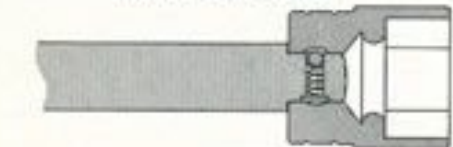
Spring operated button on male drive enters hole in one side of socket wall . . . use of small rod, nail, etc., is required to effect release. Used on Power type units.

LOXOCKET RELEASE BUTTON



Spring operated button on male drive enters hole in one side of socket wall . . . press-button in socket wall effects release. Used on $\frac{3}{4}$ and 1" drive Standard type socket wrench units.

FRICTION BALL



Spring operated button grips machined grooves in either of the four walls of the socket. A quick, sharp pull effects release. Used on $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ " drive Standard socket wrench units.

Sockets used on powered nut setters and impact wrenches take a terrific beating and Standard Type sockets are not designed for this type of work. SNAP-ON Industrial Sockets, however, are built expressly for the purpose and have the design, construction and toughness to withstand this hard usage. They provide greater economy through greatly increased numbers of nut settings per wrench. In order to help you secure the maximum life from Industrial sockets and keep breakage to a minimum we make the following recommendations.

- Position the power wrench so that the socket fits straight on the nut . . . placing it on at an angle may cause a binding effect and result in breakage.
- Use the right size socket and replace worn or undersized nuts . . . sockets used on such nuts will receive excessive wear and become subject to breakage.
- Do not continue impacting on a tightly set nut . . . this results in needless wear on both wrench and socket.
- Keep the inside of sockets clean. Dirt and grease in the socket is a common cause of breakage in both industrial and standard sockets.
- When the male drive end of a power wrench becomes worn, replace it with a new one. The loose play of the worn drive end will soon cause excess wear in the socket drive opening and cause early socket breakage.

To avoid confusion between the types of SNAP-ON sockets and attachments we have placed Industrial units in the front of this catalog and Standard socket wrench equipment in the back. Should you require specially designed tools please refer to page 37.

Replacement parts for screwdrivers, ratchets and pliers are listed herein. For repair parts not listed or for SNAP-ON tool repair service consult the SNAP-ON representative or the nearest SNAP-ON branch office.

IMPORTANT NOTICE

We reserve the right to make changes in design or construction at any time without incurring any obligation to incorporate such changes in tools or equipment previously sold . . . also to discontinue the manufacture of any tools or equipment at such time as we deem it necessary. All dimensions shown in this catalog are subject to commercial tolerances.

●
The tools listed in this catalog are guaranteed to be free from defects in materials or workmanship, but not against wear or breakage. A tool returned to us under this guaranty will be carefully examined and if found defective in material or workmanship will be repaired or replaced. Tools which have failed because of wear or abuse, intentional or unintentional, or which have been repaired by others, are not covered by this guaranty. Note: Tools indicated by this symbol (★) are, because of their nature, liable to abuse and therefore are not subject to replacement.

●
Information contained herein supersedes that given in any previous catalog of SNAP-ON Industrial wrenches and hand tools.

**FOR PRODUCTION
AND MAINTENANCE**

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REPLACEMENT PARTS

FOR

PLIERS AND SCREWDRIVERS

PLIER STUDS, WASHERS AND NUTS

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|-----------------------|-------------------------------|-------------------|------------------|---------------------|
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| 9CB | 9B-18 | 9D-3 | 47B-4 | 9B-6 & 9B-5 |
| 34 | 34-12 | 34-3 | 34-4 | 34-5 |
| 35 | 65-12 | 65-3 | 65-4 | 65-5 |
| 36 | 36-12 | 36-3A | 36-4A | 47-5 |
| 37 | 47-12 | 47-3 | 47-4 | 47-5 |
| 44B | 44B-12 | 44B-3 | 44B-4 | 44B-5 |
| 45B | 45B-12 | 45B-3 | 45B-4 | 45B-5 |
| 46B | 46B-12 | 46B-3 | 46B-4 | 47B-5 |
| 47 | 47-12 | 47-3 | 47-4 | 47-5 |
| 47B | 47B-12 | 47B-3 | 47B-4 | 47B-5 |
| 47E | 47B-12 | 47B-3 | 47B-4 | 47B-5 |
| 49 | 49-12 | 49-3 | 49-4 | 49-5 |
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| 49E | 49B-12 | 49B-3 | 49B-4 | 49B-5 |
| 50 | 105-12 | 105-3 | 34-4 | 105-5 |
| 65 | 65-12 | 65-3 | 65-4 | 65-5 |
| 105 | 105-12 | 105-3 | 34-4 | 105-5 |
| 137 | 47-12 | 47-3 | 47-4 | 47-5 |
| 137B | 47B-12 | 47B-3 | 47B-4 | 47B-5 |
| 137E | 47B-12 | 47B-3 | 47B-4 | 47B-5 |
| HCP-48 | HCP-48-12 | HCP-48-3 | 47B-4 | — |

PLIER SPRINGS AND SCREWS

- D** 955-3 Handle Spring. Fits the 945, 1945, 0955, 10955, 955, 1955, 0965, 10965, 965, 1965, 1845, 1845S, 855, 855S and 865 pliers.
- D** 875-3 Handle Spring. Fits the 875 plier.
- E** 60CS-1 Handle Spring. Fits the 60CS plier.
- F** 955-4 Spring Retaining Screw. For 955-3 and 875-3 Springs.

SCREW DRIVER REPLACEMENT BLADES

| Screw Driver No. | Blade No. | Screw Driver No. | Blade No. |
|------------------|-----------|------------------|------------|
| RG-1 | SD-1-1 | SD-146 | SD-146-1 |
| RG-2 | RG-2-1 | SD-234 | SD-234-1 |
| RG-4 | RG-4-1 | SD-412 | SD-412-1 |
| RG-6 | RG-6-1 | SD-1410 | SD-1410-1 |
| RG-8 | RG-8-1 | SD-2385 | SD-2385-1 |
| RG-12 | RG-12-1 | SDC-4 | SDC-4-1 |
| RGP-22 | SDP-22-1 | SDC-5 | SDC-5-1 |
| RGP-31 | SDP-31-1 | SDC-6 | SDC-6-1 |
| RGP-42 | SDP-42-1 | SDC-8 | SDC-8-1 |
| RGP-63 | SDP-63-1 | SDC-10 | SDC-10-1 |
| RGP-64 | RG-84-1 | SDC-13 | SDC-13-1 |
| SD-1 | SD-1-1 | SDP-215 | SDP-215-1 |
| SD-2 | SD-2-1 | SDP-225 | SDP-225-1 |
| SD-4 | SD-4-1 | SDP-315 | SDP-315-1 |
| SD-6 | SD-6-1 | SDP-425 | SDP-425-1 |
| SD-8 | SD-8-1 | SDP-635 | SDP-635-1 |
| SD-12 | SD-12-1 | SDP-645 | SDP-645-1 |
| SD-18 | 18PO-1 | SDP-1025 | SDP-1025-1 |
| SD-42 | SD-42-1 | SDP-3195 | SDP-3195-1 |
| SD-44 | SD-44-1 | SDR-1 | SDR-1-1 |
| SD-46 | SD-46-1 | SDR-3 | SDR-3-1 |
| SD-48 | SD-48-1 | SDR-4 | SDR-4-1 |
| SD-143 | SD-143-1 | SDR-6 | SDR-6-1 |
| SD-145 | SD-145-1 | SDR-8 | SDR-8-1 |

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



REPLACEMENT PARTS FOR RATCHETS

REPAIR KITS FOR STANDARD RATCHETS

L-730 Repair Kit. Contains necessary parts for repairing the GM-70L, GM-70M and GM-70N $\frac{1}{4}$ " square drive ratchets.

L-960A Repair Kit. Contains the necessary parts for repairing the F-70M, F-70N and F-710A $\frac{3}{8}$ " square drive ratchets. By substituting an F-71C6R bushing for the F-70NX-6 this kit will also repair the F-710 and F-70NX ratchets.

L-962A Repair Kit. Contains the necessary parts for repairing the F-71A and F-71B $\frac{3}{8}$ " square drive ratchets. By substituting an F-71C6R bushing for the F-70NX-6 this kit will also repair the F-71 and F-71C ratchets.

L-970A Repair Kit. Contains the necessary parts for repairing the 71-10, 71-15 and 71N $\frac{1}{2}$ " square drive ratchets. By substituting a 71NA6 bushing for the 71N2 this kit will also repair the 71NA, SR-710, SR-715 and 71M ratchets.

L-972A Repair Kit. Contains the necessary parts for servicing the L-710 and L-715 $\frac{1}{2}$ " square drive ratchets.

L-980 Repair Kit. Contains the necessary parts for servicing the L-72R $\frac{3}{4}$ " square drive ratchets. By substituting the L-72S6 bushing for the L-72N6 this kit will also repair the L-72S and GL-72S ratchets.

REPAIR PARTS FOR INDUSTRIAL RATCHETS WITH LOCKING BUTTON

| Part Description | Part Stock Numbers | | | |
|-------------------------|--------------------|-----------|-----------|--------|
| | PGM-70M | PM-70M | PF-70M | P-71M |
| Handle, Housing or Body | PGM-70M1 | PM-70M1 | PF-70M1 | P-71M1 |
| Cover Plate | PM-70M2 | M-70M2 | PF-70M2R | 71M2 |
| Gear Wheel | PGM-70N3-0 | PM-70N3-0 | PF-70N3 | P-71C |
| Pawl | M-70N4 | M-70N4 | F-70N4 | 71M4 |
| Pawl Reverse Lever | M-70N5 | M-70N5 | F-70N12-5 | 71N3-5 |
| Pawl Spring | M-70N6 | M-70N6 | F-70EA | L-71E |
| Bushing | — | — | F-71C6R | 71NA6 |
| Plate Screw (2 req.) | M-70L7 | M-70L7 | F-70N8 | 71FA |
| Gear Button Spring | P-9 | P-9 | P-6 | P-2E |
| Ball for Pawl | 3/32" | 3/32" | 5/32" | 3/16" |
| Oiler | — | — | P-1PA | — |
| Welsh Plug for Gear | P-1PA | P-1PA | P-2P | P-3P |
| Gear Lock Button | P-1A | P-1A | P-2C | P-3C |

| Part Description | Part Stock Numbers | | | |
|---------------------------|--------------------|---------|---------|--------|
| | P-74N | GL-72SH | L-73 | L-78 |
| Handle Housing or Body | L-72S1 | L-72S1 | L-73-1 | 78-1 |
| Cover Plate | L-72S2 | L-72S2 | L-73-2 | 78-2 |
| Gear Wheel | P-74N3 | L-72N3 | L-73-3 | 78-3 |
| Pawl | L-72N4 | L-72N4 | L-73-4 | 78-4 |
| Pawl Reverse Lever | L-72N5 | L-72N5 | 78-5 | 78-5 |
| Pawl Spring | L-72N7 | L-72N7 | L-73-10 | 78-9 |
| Bushing | L-72N6 | L-72S6 | L-73-6 | 78-6 |
| Reverse Lever Screw | 71FA | 71FA | L-73-9 | L-72N9 |
| Plate Screw (2 req.) | L-72N9 | L-72N9 | L-73-7 | 78-7 |
| Spring for Gear Button | P-7 | P-2E | P-3E | P-4-1 |
| Spring for Gear Ball | CF-6A | CF-6A | 1E | — |
| Gear Lock Button | P-3C | P-3C | P-3B | P-6A |
| Ball for Pawl | 5/16" | 5/16" | 3/8" | 3/8" |
| Ball for Gear | 3/16" | 3/16" | 1/4" | — |
| Ball for Handle | 1/4" | 1/4" | 1/4" | — |
| Oiler for Gear | L-72N8 | L-72N8 | L-73-8 | 78-8 |
| Handle Lock Button | P-3B | P-3B | P-3B | P-3B |
| Handle Lock Button Spring | P-3E | P-3E | P-3E | P-3E |
| Gear Filler Plug (Spacer) | — | — | — | P-3-2 |
| Welsh Plug | P-3P | — | — | P-5P |
| Oiler for Pawl | — | — | — | 56-0 |

INDUSTRIAL SOCKETS

1/4" Square Drive

POWER TYPE

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

For **HEXAGON** nuts

A STANDARD LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/16" | GM-6 | 7/16" | 3/4" | 13/32" | 7/8" |
| 1/8" | GM-7 | 13/32" | 7/8" | 13/32" | 7/8" |
| 1/4" | GM-8 | 3/8" | 7/8" | 13/32" | 7/8" |
| 5/16" | GM-9 | 7/8" | 1 1/8" | 13/32" | 7/8" |
| 3/8" | GM-10 | 1 1/8" | 1 1/4" | 13/32" | 7/8" |
| 1/2" | GM-11 | 1 1/4" | 1 1/2" | 13/32" | 7/8" |
| 5/8" | GM-12 | 1 1/2" | 1 3/4" | 13/32" | 7/8" |
| 3/4" | GM-14 | 1 3/4" | 2" | 13/32" | 7/8" |
| 1 1/8" | GM-16 | 2" | 2 1/4" | 13/32" | 7/8" |

109-GM Socket Set. Contains one each of the above sizes of standard length sockets GM-6 thru GM-16.

B MAGNETIC SOCKETS FOR SELF-TAPPING SCREWS

| SINGLE HEX | | Outside Diameter | | Depth of Breach C | Overall Length D | Replacement Socket Less Magnet |
|----------------|-----------------|--------------------|--------------------|----------------------------|------------------------|--------------------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | | |
| 3/16" | MGM-6 | 13/32" | 1/2" | 3/16" | 3/8" | MGM-6-1 |
| 1/8" | MGM-7 | 13/32" | 1/2" | 3/16" | 3/8" | MGM-7-1 |
| 1/4" | MGM-8 | 3/8" | 1/2" | 3/16" | 3/8" | MGM-8-1 |
| 5/16" | MGM-9 | 7/8" | 1 1/8" | 3/16" | 3/8" | MGM-9-1 |
| 3/8" | MGM-10 | 1 1/8" | 1 1/4" | 3/16" | 3/8" | MGM-10-1 |
| 1/2" | MGM-11 | 1 1/4" | 1 1/2" | 3/16" | 3/8" | MGM-11-1 |
| 5/8" | MGM-12 | 1 1/2" | 1 3/4" | 3/16" | 3/8" | MGM-12-1 |
| 3/4" | MGM-14 | 1 3/4" | 2" | 3/16" | 3/8" | MGM-14-1 |
| 1 1/8" | MGM-16 | 2" | 2 1/4" | 3/16" | 3/8" | MGM-16-1 |

109-MGM Socket Set. Contains one each of the above sizes of magnetic sockets MGM-6 thru MGM-16.

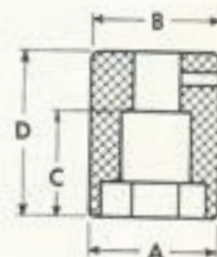
For **SQUARE** nuts

C STANDARD LENGTH SOCKETS

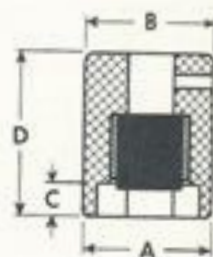
| DOUBLE SQUARE | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/16" | GM-410 | 3/16" | 3/16" | 13/32" | 7/8" |
| 1/8" | GM-416 | 13/32" | 7/8" | 13/32" | 7/8" |



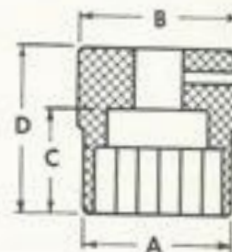
A



B

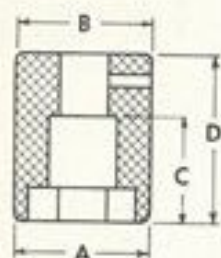


C

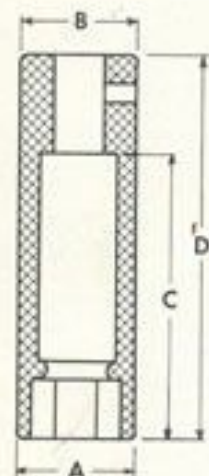


Snap-on Tools

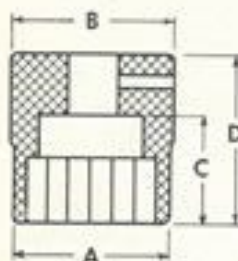
SERVING INDUSTRY
EVERYWHERE



A



B



C

INDUSTRIAL SOCKETS

9/32" Square Drive

POWER TYPE

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/16" | PM-6 | 31/64" | 1/2" | 13/32" | 3/8" |
| 3/32" | PM-7 | 27/64" | 1/2" | 13/32" | 3/8" |
| 1/4" | PM-8 | 3/4" | 1/2" | 13/32" | 3/8" |
| 5/32" | PM-9 | 31/64" | 1/2" | 13/32" | 3/8" |
| 3/16" | PM-10 | 1/2" | 1/2" | 13/32" | 3/8" |
| 11/32" | PM-11 | 1/2" | 1/2" | 13/32" | 3/8" |
| 3/8" | PM-12 | 25/64" | 3/8" | 13/32" | 3/8" |
| 7/16" | PM-14 | 5/8" | 5/8" | 13/32" | 3/8" |
| 1/2" | PM-16 | 11/16" | 11/16" | 13/32" | 3/8" |

109-PM Socket Set. Contains one each of the above sizes of standard length sockets PM-6 thru PM-16.

B BOLT CLEARANCE LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/16" | PSM-6 | 31/64" | 1/2" | 1 31/32" | 2" |
| 3/32" | PSM-7 | 27/64" | 1/2" | 1 31/32" | 2" |
| 5/32" | PSM-9 | 3/4" | 1/2" | 1 31/32" | 2" |
| 3/16" | PSM-10 | 31/64" | 1/2" | 1 31/32" | 2" |
| 11/32" | PSM-11 | 1/2" | 1/2" | 1 31/32" | 2" |

105-PSM Socket Set. Contains one each of the above sizes of bolt clearance length sockets PSM-6 thru PSM-11.

For SQUARE nuts

C STANDARD LENGTH SOCKETS

| DOUBLE SQUARE | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 1/4" | PM-408 | 15/16" | 1/2" | 13/32" | 3/8" |
| 3/16" | PM-410 | 7/8" | 3/4" | 13/32" | 3/8" |
| 3/8" | PM-412 | 7/8" | 15/16" | 13/32" | 3/8" |

INDUSTRIAL SOCKETS

3/8" Square Drive

POWER TYPE

for HEXAGON nuts

A and B STANDARD LENGTH SOCKETS

| Wrench Size | Stock Numbers | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|---------------|--------------|------------------|--------------|------------------------|------------------|
| | A DOUBLE HEX | B SINGLE HEX | Socket End A | Handle End B | | |
| 3/8" | | PF-100 | 1/2" | 1 1/4" | 3/8" | 3/4" |
| 1/2" | | PF-110 | 5/8" | 1 3/4" | 3/8" | 3/4" |
| 5/8" | | PF-120 | 3/4" | 1 7/8" | 3/8" | 3/4" |
| 3/4" | PFDH-140 | PF-140 | 7/8" | 2" | 3/8" | 3/4" |
| 1/2" | PFDH-160 | PF-160 | 1" | 2 1/4" | 3/8" | 3/4" |
| 1 1/2" | | PF-170 | 1 1/8" | 2 3/4" | 3/8" | 3/4" |
| 1 1/4" | PFDH-180 | PF-180 | 1 1/4" | 2 7/8" | 3/8" | 3/4" |
| 1 1/2" | | PF-190 | 1 1/2" | 3" | 3/8" | 3/4" |
| 1 3/4" | | PF-200 | 1 3/4" | 3 1/4" | 3/8" | 3/4" |
| 1 1/2" | PFDH-220 | PF-220 | 1 1/2" | 3 1/2" | 3/8" | 1" |
| 3/4" | | PF-240 | 1 1/2" | 3 1/2" | 3/8" | 1" |

211-PF Socket Set. Contains one each of the above sizes of standard single hex sockets PF-100 thru PF-240.

C BOLT CLEARANCE LENGTH SOCKETS

| Wrench Size | Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| | | Socket End A | Handle End B | | |
| 3/8" | SPF-120 | 1/2" | 1 1/4" | 1 1/4" | 1 1/2" |
| 1/2" | SPF-140 | 5/8" | 1 3/4" | 1 1/4" | 1 1/2" |
| 5/8" | SPF-160 | 3/4" | 1 7/8" | 1 1/4" | 1 1/2" |
| 3/4" | SPF-180 | 7/8" | 2" | 1 1/4" | 1 1/2" |
| 1/2" | SPF-200 | 1" | 2 1/4" | 1 1/4" | 1 1/2" |
| 3/4" | SPF-240 | 1 1/8" | 2 3/4" | 1 1/4" | 1 1/2" |

206-SPF Socket Set. Contains one each of the above sizes of bolt clearance sockets SPF-120 thru SPF-240.

D SPECIAL SOCKETS FOR SELF-TAPPING SCREWS

| Wrench Size | Stock Number | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|--------------|-------------------|------------------|
| | | Socket End A | Handle End B | | |
| 3/8" | PKF-100 | 1/2" | 1 1/4" | 3/32" | 1 1/4" |
| 1/2" | PKF-121 | 5/8" | 1 3/4" | 3/32" | 1 1/4" |
| 5/8" | PKF-141 | 3/4" | 1 7/8" | 3/32" | 1 1/4" |
| 3/4" | PKF-161 | 7/8" | 2" | 3/32" | 1 1/4" |

204-PKF Socket Set. Contains one each of the above sizes of self-tapping screw sockets PKF-100 thru PKF-161.

E MAGNETIC SOCKETS FOR SELF-TAPPING SCREWS

| Wrench Size | Stock Number | Outside Diameter | | Depth of Broach C | Overall Length D | Replacement Socket Less Magnet |
|-------------|--------------|------------------|--------------|-------------------|------------------|--------------------------------|
| | | Socket End A | Handle End B | | | |
| 3/8" | MPKF-100 | 1/2" | 1 1/4" | 3/32" | 1 1/4" | MPKF-100-1 |
| 1/2" | MPKF-120 | 5/8" | 1 3/4" | 3/32" | 1 1/4" | MPKF-120-1 |
| 5/8" | MPKF-140 | 3/4" | 1 7/8" | 3/32" | 1 1/4" | MPKF-140-1 |
| 3/4" | MPKF-160 | 7/8" | 2" | 3/32" | 1 1/4" | MPKF-160-1 |

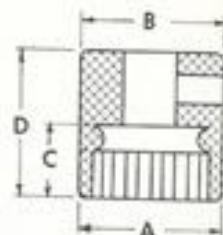
204-MPKF Socket Set. Contains one each of the above sizes of magnetic self-tapping sockets MPKF-100 thru MPKF-160.

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



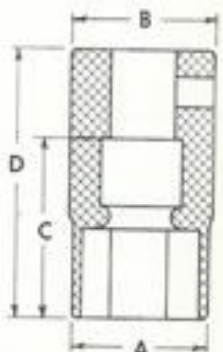
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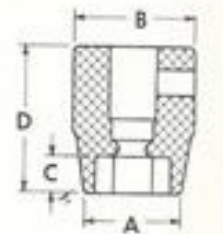
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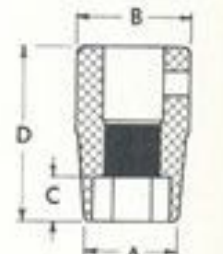
C



D



E



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE

INDUSTRIAL SOCKETS

3/8" Square Drive

POWER TYPE

For HEXAGON nuts

A SEMI-FLEXOCKETS

Provide a maximum of 7 1/2 degrees flexible movement

| SINGLE HEX | | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|--------------|-------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | PF-125 | 1 1/32" | 2 1/32" | 1/4" | 1 3/16" |
| 7/16" | PF-145 | 2 1/32" | 3 1/32" | 1/4" | 1 3/8" |
| 1/2" | PF-165 | 2 1/16" | 3 1/16" | 3/16" | 1 5/8" |
| 9/16" | PF-185 | 2 5/16" | 3 5/16" | 3/16" | 1 7/8" |

204-PFS Semi-Flexocket Set. Contains one each of the above Semi-Flexockets, PF-125 thru PF-185.

B FLEXOCKETS

| SINGLE HEX | | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|--------------|-------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | PFU-14A | 5/8" | 1 1/16" | 5/32" | 1 1/4" |
| 1/2" | PFU-16C | 2 1/32" | 3 1/16" | 5/16" | 1 3/8" |
| 9/16" | PFU-18C | 1 1/16" | 3 1/4" | 5/16" | 1 5/8" |
| 5/8" | PFU-20C | 3/4" | 3 1/4" | 11/32" | 1 3/4" |

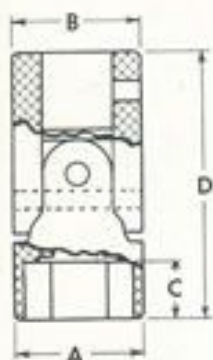
204-PFU Flexocket Set. Contains one each of the above Flexockets, PFU-14A thru PFU-20C.

For SQUARE nuts

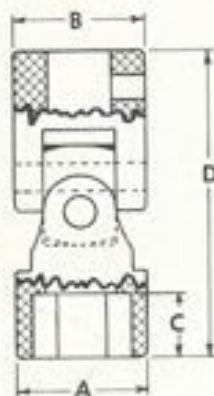
C STANDARD LENGTH SOCKETS

| DOUBLE SQUARE | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | PF-410 | 5/8" | 1 1/4" | 3/16" | 3/8" |
| 7/16" | PF-412 | 1 1/16" | 1 3/4" | 3/16" | 3/8" |
| 1/2" | PF-414 | 3/4" | 2 1/4" | 3/16" | 1" |
| 9/16" | PF-416 | 3/4" | 2 3/8" | 3/16" | 1" |

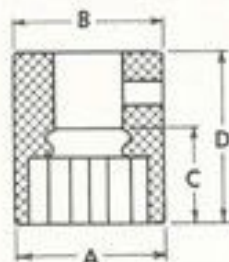
204-PF Socket Set. Contains one each of the above standard length square sockets, PF-410 thru PF-416.



A



B



C

INDUSTRIAL SOCKETS

1/2" Square Drive

POWER TYPE

For HEXAGON nuts

A AND B STANDARD LENGTH SOCKETS

| Wrench Size | Stock Number | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|--------------|------------------|--------------|------------------------|------------------|
| | A DOUBLE HEX | B SINGLE HEX | Socket End A | Handle End B | | |
| 3/8" | | P-120 | 3/8" | 3/8" | 3/8" | 1 1/2" |
| 3/8" | PDH-140 | P-140 | 1/4" | 3/8" | 3/8" | 1 1/2" |
| 1/2" | PDH-160 | P-160 | 5/16" | 3/8" | 3/8" | 1 1/2" |
| 3/4" | PDH-180 | P-180 | 3/8" | 3/8" | 3/8" | 1 1/2" |
| 7/8" | | P-190 | 5/8" | 1" | 3/8" | 1 1/2" |
| 1" | PDH-200 | P-200 | 5/8" | 1" | 3/8" | 1 1/2" |
| 1 1/8" | PDH-220 | P-220 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 1/4" | PDH-240 | P-240 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 1/2" | | P-250 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 3/4" | PDH-260 | P-260 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 3/4" | PDH-280 | P-280 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 3/4" | PDH-300 1/2 | P-300 1/2 | 1 3/4" | 1 3/4" | 1 1/4" | 1 3/4" |
| 1" | | P-320 1/2 | 1 3/4" | 1 3/4" | 1 1/4" | 1 3/4" |
| 1 1/8" | | P-340 1/2 | 1 3/4" | 1 3/4" | 1 3/8" | 2" |

314-P Socket Set. Contains fourteen single hexagon sockets P-120 thru P-340 1/2.

C BOLT CLEARANCE SOCKETS

| Wrench Size | SINGLE HEX Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|-------------------------|------------------|--------------|------------------------|------------------|
| | | Socket End A | Handle End B | | |
| 3/8" | SP-120 | 3/8" | 3/8" | 2 3/4" | 3 3/4" |
| 3/8" | SP-140 | 1/4" | 3/8" | 2 3/4" | 3 3/4" |
| 1/2" | SP-160 | 5/16" | 3/8" | 2 3/4" | 3 3/4" |
| 3/4" | SP-180 | 3/8" | 3/8" | 2 3/4" | 3 3/4" |
| 3/4" | SP-200 | 5/8" | 1" | 2 3/4" | 3 3/4" |
| 1 1/8" | SP-220 | 1 1/4" | 1 1/4" | 2 3/4" | 3 3/4" |
| 1 1/4" | SP-240 | 1 1/4" | 1 1/4" | 2 3/4" | 3 3/4" |
| 1 1/4" | SP-260 | 1 1/4" | 1 1/4" | 2 3/4" | 3 3/4" |
| 1 1/4" | SP-280 | 1 1/4" | 1 1/4" | 2 3/4" | 3 3/4" |
| 1 1/4" | SP-300 1/2 | 1 3/4" | 1 3/4" | 2 3/4" | 3 3/4" |
| 1" | SP-320 1/2 | 1 3/4" | 1 3/4" | 2 3/4" | 3 3/4" |

311-SP Socket Set. Contains eleven bolt clearance sockets SP-120 thru SP-320 1/2.

D MAGNETIC SELF-TAPPING SCREW SOCKETS

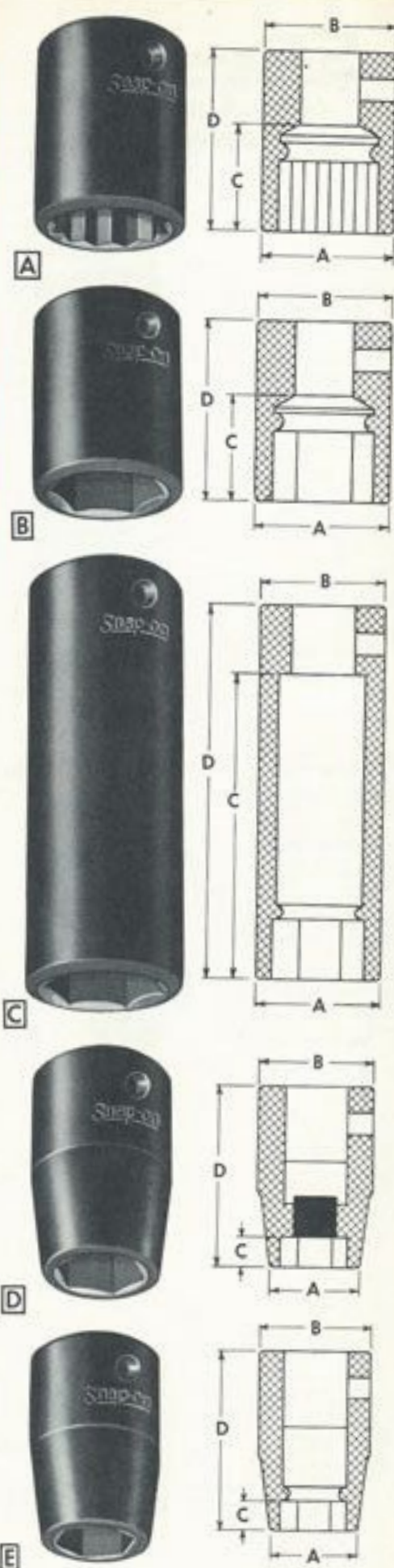
| Wrench Size | SINGLE HEX Stock Number | Outside Diameter | | Depth of Broach C | Overall Length D | Replacement Socket Less Magnet |
|-------------|-------------------------|------------------|--------------|-------------------|------------------|--------------------------------|
| | | Socket End A | Handle End B | | | |
| 3/8" | MPK-120 | 3/8" | 3/8" | 3/8" | 1 1/2" | MPK-120-1 |
| 3/8" | MPK-140 | 1/4" | 3/8" | 3/8" | 1 1/2" | MPK-140-1 |
| 1/2" | MPK-160 | 5/16" | 3/8" | 3/8" | 1 1/2" | MPK-160-1 |
| 3/4" | MPK-180 | 3/8" | 3/8" | 3/8" | 1 1/2" | MPK-180-1 |

304-MPK Socket Set. Contains four magnetic sockets MPK-120 thru MPK-180.

E SPECIAL SOCKETS FOR SELF-TAPPING SCREWS

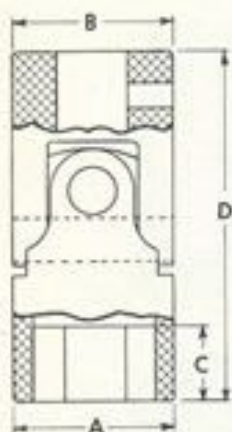
| Wrench Size | SINGLE HEX Stock Number | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|-------------------------|------------------|--------------|-------------------|------------------|
| | | Socket End A | Handle End B | | |
| 3/8" | PK-120 | 3/8" | 3/8" | 3/8" | 1 1/2" |
| 3/8" | PK-140 | 1/4" | 3/8" | 3/8" | 1 1/2" |
| 1/2" | PK-160 | 5/16" | 3/8" | 3/8" | 1 1/2" |
| 3/4" | PK-180 | 3/8" | 3/8" | 3/8" | 1 1/2" |
| 3/4" | PK-200 | 5/8" | 1" | 3/8" | 1 1/2" |

305-PK Socket Set. Contains five self-tapping screw sockets PK-120 thru PK-200.

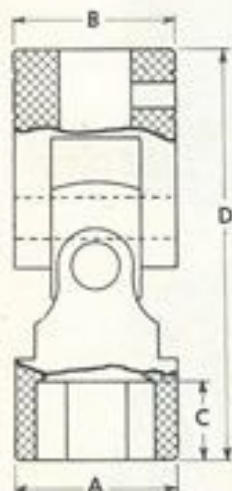


Snap-on Tools

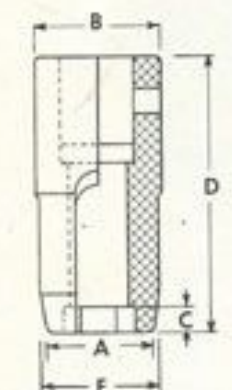
SERVING INDUSTRY
EVERYWHERE



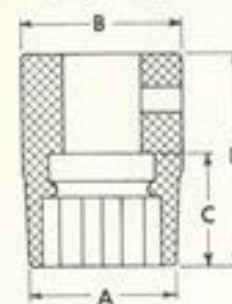
A



B



C



D

INDUSTRIAL SOCKETS

1/2" Square Drive

POWER TYPE

For HEXAGON nuts

A SEMI-FLEXOCKETS

Provides a maximum of 7 1/2 degrees flexible movement

| SINGLE HEX | | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|--------------|-------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 1/2" | PU-165 | 3/4" | 3/8" | 3/8" | 2 1/2" |
| 3/4" | PU-185 | 7/8" | 3/4" | 3/4" | 2 3/4" |
| 1" | PU-205 | 1 1/8" | 1 1/8" | 3/4" | 2 1/4" |
| 1 1/4" | PU-225 | 1 3/8" | 1 3/8" | 1" | 2 3/2" |
| 1 1/2" | PU-245 | 1 5/8" | 1 5/8" | 1 1/8" | 2 3/4" |

305-PUS Socket Set. Contains one each of the above sizes of Semi-Flexockets. PU-165 thru PU-245.

B FLEXOCKETS

| SINGLE HEX | | Outside Diameter | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|--------------|-------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | PU-14 | 9/16" | 1/2" | 3/8" | 2 1/4" |
| 1/2" | PU-16 | 3/4" | 3/4" | 3/8" | 2 3/8" |
| 5/8" | PU-18 | 7/8" | 1 1/8" | 1/2" | 2 3/4" |
| 3/4" | PU-20 | 1 1/8" | 1 1/8" | 3/8" | 2 1/2" |
| 1 1/4" | PU-22 | 1 3/8" | 1 3/8" | 3/4" | 2 3/2" |
| 1 1/2" | PU-24 | 1 5/8" | 1 5/8" | 1" | 2 3/4" |
| 1 3/4" | PU-26 | 1 7/8" | 1 7/8" | 1 1/8" | 2 3/8" |
| 2" | PU-28 | 2 1/8" | 2 1/8" | 1 1/4" | 2 3/4" |

308-PU Socket Set. Contains one each of the above sizes of Flexockets. PU-14 thru PU-28.

C ZERK GREASE FITTING SOCKET

| Wrench Size | Stock Number | Outside Diameter | | | Depth of Broach C | Overall Length D |
|-------------|--------------|------------------|---------------|--------------|-------------------|------------------|
| | | Socket Turn A | Socket Nose E | Handle End B | | |
| 3/8" | N-36 | 7/16" | 7/16" | 3/8" | 3/8" | 1 1/2" |

For SQUARE nuts

D STANDARD LENGTH SOCKETS

| DOUBLE SQUARE | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | P-412 | 7/16" | 3/8" | 3/8" | 1 1/2" |
| 1/2" | P-414 | 1 1/8" | 1 1/8" | 3/8" | 1 3/4" |
| 5/8" | P-416 | 1 1/4" | 1" | 3/8" | 1 3/4" |
| 3/4" | P-418 | 1 1/2" | 1 1/4" | 3/8" | 1 3/4" |
| 7/8" | P-420 | 1 3/4" | 1 3/4" | 3/8" | 1 3/4" |
| 1" | P-422 | 1 7/8" | 1 3/4" | 3/8" | 1 3/4" |
| 1 1/4" | P-424 | 2 1/8" | 1 3/4" | 3/8" | 1 3/4" |
| 1 1/2" | P-426 | 2 1/4" | 1 3/4" | 3/8" | 1 3/4" |
| 1 3/4" | P-428 | 2 3/8" | 1 3/4" | 3/8" | 1 3/4" |
| 2" | P-432 | 2 7/8" | 1 3/4" | 1 1/4" | 1 3/4" |

310-P Socket Set. Contains one each of the above sizes of square sockets. P-412 thru P-432.

INDUSTRIAL SOCKETS

1/2" Square Drive

THIN WALL TYPE—BLACK FINISH

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

These sockets are not built for use on powered nut setters or impact wrenches but are designed for use on 1/2" drive handles listed on pages 30, and 31. They should only be used for hand nut turning work.

For HEXAGON nuts

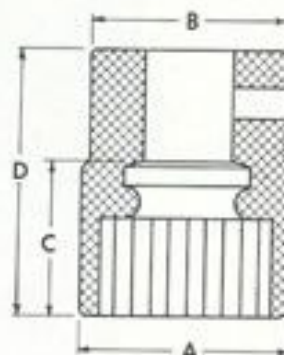
A STANDARD LENGTH SOCKETS

| DOUBLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | SB-140 | 3/8" | 3/8" | 3/8" | 1 1/2" |
| 1/2" | SB-160 | 1/2" | 1/2" | 3/8" | 1 1/2" |
| 5/8" | SB-180 | 5/8" | 5/8" | 3/8" | 1 1/2" |
| 3/4" | SB-190 | 3/4" | 3/4" | 3/8" | 1 1/2" |
| 7/8" | SB-200 | 7/8" | 7/8" | 3/8" | 1 1/2" |
| 1" | SB-220 | 1" | 1" | 3/8" | 1 1/2" |
| 1 1/8" | SB-240 | 1 1/8" | 1 1/8" | 3/8" | 1 1/2" |
| 1 1/4" | SB-250 | 1 1/4" | 1 1/4" | 3/8" | 1 1/2" |
| 1 1/2" | SB-260 | 1 1/2" | 1 1/2" | 3/8" | 1 1/2" |
| 1 3/4" | SB-280 | 1 3/4" | 1 3/4" | 3/8" | 1 1/2" |
| 2" | SB-300 | 2" | 2" | 3/8" | 1 1/2" |
| 2 1/4" | SB-320 | 2 1/4" | 2 1/4" | 3/8" | 1 1/2" |
| 2 1/2" | SB-340 | 2 1/2" | 2 1/2" | 1" | 1 3/4" |
| 2 3/4" | SB-360 | 2 3/4" | 2 3/4" | 1 1/8" | 1 3/4" |
| 3" | SB-400 | 3" | 3" | 1 1/4" | 1 3/4" |

315-SB Socket Set. Contains one each of the above sizes of standard length sockets SB-140 thru SB-400.

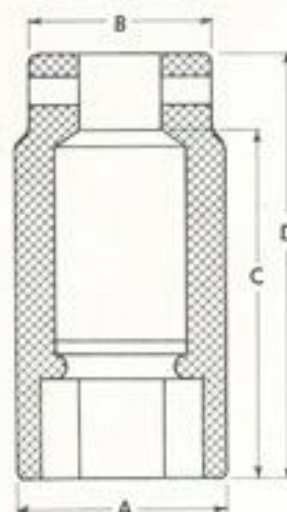
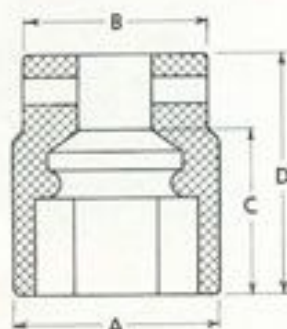


A



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



INDUSTRIAL SOCKETS

5/8" Square Drive

POWER-IMPACT TYPE

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 5/16" | IM-181 | 5/16" | 13/16" | 3/8" | 1 1/2" |
| 3/8" | IM-201 | 13/16" | 1 1/4" | 3/8" | 1 3/4" |
| 1/2" | IM-221 | 1 1/4" | 1 5/8" | 3/8" | 1 7/8" |
| 3/4" | IM-241 | 1 5/8" | 1 3/4" | 3/8" | 1 7/8" |
| 7/8" | IM-261 | 1 3/4" | 1 3/4" | 3/8" | 1 7/8" |
| 1" | IM-281 | 1 3/4" | 1 3/4" | 1" | 1 5/8" |
| 1 1/8" | IM-301 | 1 3/4" | 1 3/4" | 1 1/8" | 1 3/4" |
| 1 1/4" | IM-321 | 1 3/4" | 1 3/4" | 1 1/4" | 1 3/4" |
| 1 1/2" | IM-341 | 1 3/4" | 1 3/4" | 1 1/2" | 2" |
| 1 3/4" | IM-361 | 1 3/4" | 1 3/4" | 1 3/4" | 2" |
| 1 7/8" | IM-381 | 1 3/4" | 1 3/4" | 1 3/4" | 2" |
| 2" | IM-401 | 1 3/4" | 1 3/4" | 1 3/4" | 2" |
| 1 5/8" | IM-421 | 1 3/4" | 1 3/4" | 1 5/8" | 2 1/8" |
| 1 3/4" | IM-441 | 2" | 1 3/4" | 1 3/4" | 2 1/8" |
| 1 3/4" | IM-461 | 2 1/4" | 1 3/4" | 1 3/4" | 2 1/4" |
| 1 3/4" | IM-481 | 2 1/4" | 1 3/4" | 1 3/4" | 2 1/4" |

416-IM Socket Set. Contains one each of the above sizes of standard length sockets IM-181 thru IM-481.

B BOLT CLEARANCE LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 5/16" | SIM-181 | 5/16" | 1 3/16" | 2 1/8" | 3 1/4" |
| 3/8" | SIM-201 | 1 1/4" | 1 3/4" | 2 1/8" | 3 1/4" |
| 1/2" | SIM-221 | 1 1/4" | 1 3/4" | 2 1/8" | 3 1/4" |
| 3/4" | SIM-241 | 1 5/8" | 1 3/4" | 2 1/8" | 3 1/4" |
| 7/8" | SIM-261 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/4" |
| 1" | SIM-281 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/4" |
| 1 1/8" | SIM-301 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/4" |
| 1 1/4" | SIM-321 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/2" |
| 1 1/2" | SIM-341 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/2" |
| 1 3/4" | SIM-361 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/2" |
| 1 7/8" | SIM-381 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/2" |
| 2" | SIM-401 | 1 3/4" | 1 3/4" | 2 1/8" | 3 1/2" |

411-SIM Socket Set. Contains one each of the above sizes of bolt clearance sockets SIM-181 thru SIM-401 with the exception of the SIM-381.

INDUSTRIAL SOCKETS

5/8" Square Drive
POWER-IMPACT TYPE

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

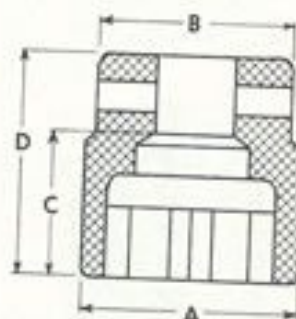
For **SQUARE** nuts

A STANDARD LENGTH SOCKETS

| DOUBLE SQUARE | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | •PHD-418 | 1 1/8" | 1 1/2" | 3/8" | 1 1/2" |
| 3/8" | IM-420 | 1 1/8" | 1 3/8" | 3/8" | 1 1/2" |
| 1/2" | •PHD-422A | 1 1/4" | 1 5/8" | 3/8" | 1 3/4" |
| 1/2" | IM-424 | 1 3/8" | 1 3/4" | 3/8" | 1 3/4" |
| 9/16" | IM-426 | 1 1/2" | 1 3/4" | 3/8" | 1 3/4" |
| 3/4" | IM-428 | 1 3/4" | 1 3/4" | 1" | 1 3/4" |
| 3/4" | •PHD-430 | 1 3/4" | 1 3/4" | 1" | 1 3/4" |
| 1" | IM-432 | 1 3/4" | 1 3/4" | 1 1/4" | 1 3/4" |
| 1 1/4" | IM-434 | 1 3/4" | 1 3/4" | 1 3/4" | 1 3/4" |
| 1 1/2" | IM-436 | 2" | 1 3/2" | 1 3/8" | 2" |

410-IM Socket Set. Contains one each of the above sizes of square sockets PHD-418 thru IM-436.

* These sockets are made for use on power drivers only and not for impact wrench use. They will be superseded by the IM Impact type as soon as present stocks are depleted.

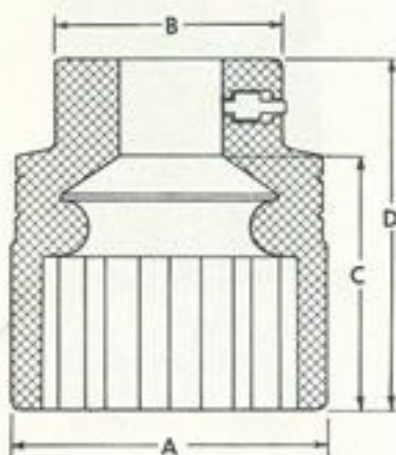


Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



A



INDUSTRIAL SOCKETS

3/4" Square Drive

THIN WALL TYPE - BLACK FINISH

These sockets are not built for use with powered clutch-type nut setters or impact wrenches. They are designed for use with 3/4" drive handles on pages 30 and 31, and should be used only for hand nut turning work.

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

| DOUBLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | GLDH-282 | 1 1/4" | 1 3/4" | 1 1/4" | 2" |
| 1/2" | GLDH-302 | 1 3/8" | 1 7/8" | 1 3/4" | 2" |
| 5/8" | GLDH-312 | 1 1/2" | 1 7/4" | 1 3/4" | 2" |
| 1" | GLDH-322 | 1 5/8" | 1 7/2" | 1 3/4" | 2 1/4" |
| 1 1/8" | GLDH-342 | 1 3/4" | 1 7/2" | 1 3/4" | 2 3/8" |
| 1 1/4" | GLDH-362 | 1 3/4" | 1 7/2" | 1 3/4" | 2 3/8" |
| 1 1/2" | GLDH-382 | 1 7/8" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 3/4" | GLDH-402 | 1 3/4" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 5/8" | GLDH-422A | 1 3/4" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 3/4" | GLDH-442 | 1 7/8" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 5/8" | GLDH-462 | 2" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 3/2" | GLDH-482 | 2 1/4" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 5/8" | GLDH-502 | 2 3/8" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 3/4" | GLDH-522 | 2 1/4" | 1 7/2" | 1 3/4" | 2 3/4" |
| 1 5/8" | GLDH-542 | 2 3/8" | 1 7/2" | 2" | 2 3/4" |
| 1 3/4" | GLDH-562 | 2 3/8" | 1 7/2" | 2" | 2 3/4" |
| 1 5/8" | GLDH-582 | 2 1/2" | 1 7/2" | 2 1/4" | 2 3/4" |
| 1 3/4" | GLDH-602 | 2 3/8" | 1 7/2" | 2 3/4" | 3" |
| 2" | GLDH-642 | 2 3/4" | 1 7/2" | 2 3/4" | 3 1/4" |
| 2 1/8" | GLDH-682 | 2 3/8" | 1 7/2" | 2 1/2" | 3 1/4" |
| 2 1/4" | GLDH-702 | 2 3/8" | 1 7/2" | 2 1/2" | 3 1/4" |
| 2 1/4" | GLDH-722 | 3 1/4" | 1 7/2" | 2 3/4" | 3 1/4" |

412-GLDH Socket Set. Contains twelve sockets, one each of the above standard length sockets GLDH-282 thru GLDH-482.

422-GLDH Socket Set. Contains twenty-two sockets, one each of the above standard length sockets GLDH-282 thru GLDH-722.

INDUSTRIAL SOCKETS

3/4" Square Drive

POWER-IMPACT TYPE

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 5/16" | IM-182 | 1" | 1 3/8" | 1" | 1 3/4" |
| 3/8" | IM-202 | 1 1/8" | 1 3/8" | 1" | 1 3/4" |
| 1/2" | IM-222 | 1 3/8" | 1 3/8" | 1" | 1 3/4" |
| 3/4" | IM-242 | 1 3/4" | 1 3/8" | 1" | 1 3/4" |
| 13/16" | IM-262 | 1 3/4" | 1 3/8" | 1 1/4" | 1 3/4" |
| 7/8" | IM-282 | 1 3/4" | 1 3/8" | 1 1/4" | 1 3/4" |
| 15/16" | IM-302 | 1 3/4" | 1 3/8" | 1 1/4" | 1 3/4" |
| 1" | IM-322 | 1 3/4" | 1 3/8" | 1 1/4" | 2" |
| 1 1/16" | IM-342 | 1 3/4" | 1 3/8" | 1 1/4" | 2" |
| 1 1/8" | IM-362 | 1 3/4" | 1 3/8" | 1 3/4" | 2 1/8" |
| 1 1/4" | IM-402 | 2" | 1 3/4" | 1 3/4" | 2 1/8" |
| 1 1/2" | IM-422 | 2 1/8" | 1 3/4" | 1 3/4" | 2 1/8" |
| 1 3/4" | IM-442 | 2 1/8" | 1 3/4" | 1 1/2" | 2 1/8" |
| 1 5/8" | IM-462 | 2 1/8" | 1 3/4" | 1 1/2" | 2 1/8" |
| 1 7/8" | IM-482 | 2 1/8" | 1 3/4" | 1 1/2" | 2 1/8" |

415-IM Socket Set. Contains one each of the above sizes of standard length sockets IM-182 thru IM-482.

B BOLT CLEARANCE LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 5/16" | SIM-182 | 1" | 1 3/8" | 2 3/8" | 3" |
| 3/8" | SIM-202 | 1 1/8" | 1 3/8" | 2 3/8" | 3" |
| 1/2" | SIM-222 | 1 3/8" | 1 3/8" | 2 3/8" | 3" |
| 3/4" | SIM-242 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 13/16" | SIM-262 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 7/8" | SIM-282 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 15/16" | SIM-302 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 1" | SIM-322 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 1 1/16" | SIM-342 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 1 1/8" | SIM-362 | 1 3/4" | 1 3/8" | 2 3/8" | 3" |
| 1 1/4" | SIM-402 | 2" | 1 3/4" | 2 3/8" | 3 1/4" |
| 1 1/2" | SIM-422 | 2 1/8" | 1 3/4" | 2 3/8" | 3 1/4" |
| 1 3/4" | SIM-442 | 2 1/8" | 1 3/4" | 2 3/8" | 3 1/4" |
| 1 5/8" | SIM-462 | 2 1/8" | 1 3/4" | 2 3/8" | 3 1/2" |
| 1 7/8" | SIM-482 | 2 1/8" | 1 3/4" | 2 3/8" | 3 1/2" |

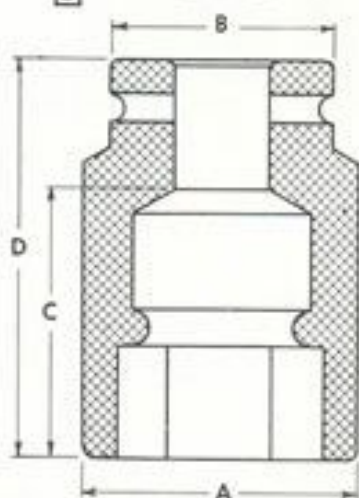
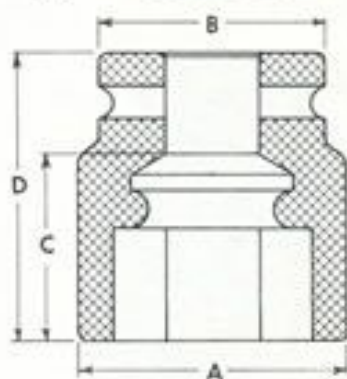
415-SIM Socket Set. Contains one each of the above sizes of bolt clearance length sockets SIM-182 thru SIM-482.

Locking Ring and Pin

For sockets listed above and on page 21.

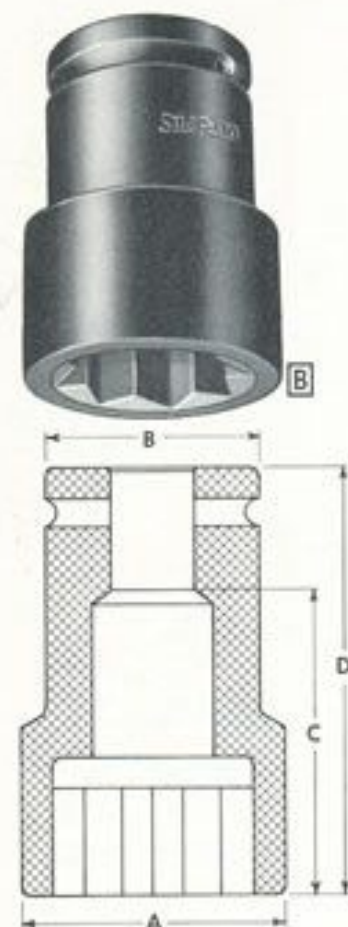
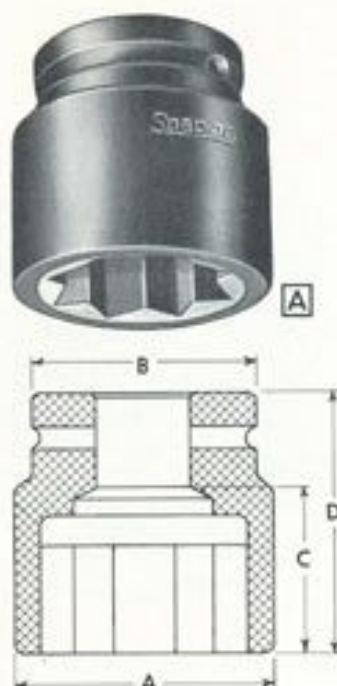
C IM-182R Locking Ring, synthetic rubber, fits all 3/4" square drive sockets.

D IM-182P Locking Pin, fits all 3/4" square drive sockets.



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



INDUSTRIAL SOCKETS

3/4" Square Drive

POWER-IMPACT TYPE

For SQUARE nuts

A STANDARD LENGTH SOCKETS

| Wrench Size | Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| | | Socket End A | Handle End B | | |
| SINGLE SQUARE SIZES | | | | | |
| 1/2" | •IP-616 | 1 1/4" | 1 1/4" | 3/8" | 1 3/8" |
| 3/4" | IM-618 | 1 3/8" | 1 3/8" | 3/4" | 1 3/4" |
| 5/8" | IM-620 | 1 3/4" | 1 3/4" | 1" | 1 3/4" |
| 1 1/4" | •IP-622 | 1 7/8" | 1 1/2" | 3/8" | 1 3/4" |
| 3/4" | IM-624 | 1 3/8" | 1 5/8" | 1" | 1 3/4" |
| DOUBLE SQUARE SIZES | | | | | |
| 5/8" | IM-626 | 1 3/8" | 1 3/8" | 1" | 1 3/4" |
| 3/4" | IM-628 | 1 3/8" | 1 3/8" | 1 1/8" | 1 3/8" |
| 5/8" | IM-630 | 1 3/8" | 1 3/8" | 1 1/8" | 1 3/8" |
| 1" | IM-632 | 2" | 1 3/4" | 1 1/4" | 2" |
| 1 1/4" | IM-634 | 2" | 1 3/4" | 1 1/4" | 2" |
| 1 1/8" | IM-636 | 2 1/4" | 1 3/4" | 1 3/8" | 2 1/8" |
| 1 3/8" | IM-638 | 2 1/4" | 1 3/4" | 1 3/8" | 2 1/8" |
| 1 1/2" | IM-640 | 2 1/2" | 1 3/4" | 1 3/8" | 2 1/8" |
| 1 3/4" | IM-642 | 2 1/2" | 1 3/4" | 1 1/2" | 2 1/4" |

* These sockets will be superseded by the IM series as soon as present stocks are depleted. IP series sockets are fitted with an internal locking ring and do not have the external groove of the IM series as illustrated.

413-IM Socket Set. Contains one each of the above sizes of standard length sockets IP-616 thru IM-642.

B BOLT CLEARANCE LENGTH SOCKETS

| Wrench Size | Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| | | Socket End A | Handle End B | | |
| SINGLE SQUARE SIZES | | | | | |
| 1/2" | SIM-616 | 1 1/4" | 1 3/8" | 2 1/4" | 3" |
| 3/8" | SIM-618 | 1 3/8" | 1 3/8" | 2 1/4" | 3" |
| 5/8" | SIM-620 | 1 3/4" | 1 3/8" | 2 1/4" | 3" |
| 3/4" | SIM-622 | 1 3/8" | 1 3/8" | 2 1/4" | 3" |
| 3/4" | SIM-624 | 1 3/8" | 1 3/8" | 2 1/4" | 3" |
| DOUBLE SQUARE SIZES | | | | | |
| 5/8" | SIM-626 | 1 3/8" | 1 3/8" | 2 1/4" | 3" |
| 3/8" | SIM-628 | 1 3/8" | 1 3/8" | 2 1/4" | 3" |
| 5/8" | SIM-630 | 1 3/4" | 1 3/8" | 2 1/4" | 3" |
| 1" | SIM-632 | 2" | 1 3/4" | 2 1/4" | 3" |
| 1 1/8" | SIM-634 | 2" | 1 3/4" | 2 1/4" | 3" |
| 1 1/8" | SIM-636 | 2 1/8" | 1 3/4" | 2 1/4" | 3" |
| 1 3/8" | SIM-638 | 2 1/4" | 1 3/4" | 2 1/4" | 3" |
| 1 1/4" | SIM-640 | 2 3/8" | 1 3/4" | 2 1/2" | 3 1/4" |
| 1 3/8" | SIM-642 | 2 3/4" | 1 3/4" | 2 1/2" | 3 1/4" |

414-SIM Socket Set. Contains one each of the above sizes of bolt clearance length sockets SIM-616 thru SIM-642.

INDUSTRIAL SOCKETS

1" Square Drive
POWER-IMPACT TYPE

Snap-on Tools

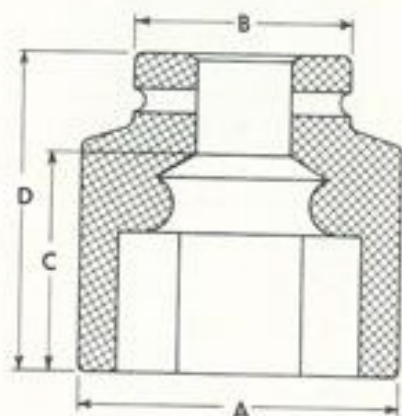
FOR PRODUCTION
AND MAINTENANCE

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/4" | IM-243 | 1 1/2" | 2 1/8" | 1 5/8" | 2 1/4" |
| 13/16" | IM-263 | 1 5/8" | 2 1/8" | 1 5/8" | 2 1/4" |
| 7/8" | IM-283 | 1 7/8" | 2 1/8" | 1 5/8" | 2 1/4" |
| 15/16" | IM-303 | 1 15/16" | 2 1/8" | 1 5/8" | 2 1/4" |
| 1" | IM-323 | 1 3/4" | 2 1/8" | 1 5/8" | 2 1/4" |
| 1 1/16" | IM-343 | 1 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 1/8" | IM-363 | 1 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 1/4" | IM-383 | 1 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 1/2" | IM-403 | 2" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 3/4" | IM-423 | 2 1/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 5/8" | IM-443 | 2 1/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 1 7/8" | IM-463 | 2 1/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2" | IM-483 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 1/16" | IM-503 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 1/8" | IM-523 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 1/4" | IM-543 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 1/2" | IM-563 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 3/4" | IM-583 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 5/8" | IM-603 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 2 7/8" | IM-623 | 2 3/4" | 2 3/8" | 1 3/4" | 2 3/4" |
| 3" | IM-643 | 3" | 2 3/8" | 2 1/4" | 3 1/4" |
| 2 1/4" | IM-663 | 3" | 2 3/8" | 2 1/4" | 3 1/4" |
| 2 1/2" | IM-683 | 3 1/4" | 2 3/8" | 2 1/4" | 3 1/4" |
| 2 3/4" | IM-703 | 3 1/4" | 2 3/8" | 2 1/4" | 3 1/4" |
| 2 5/8" | IM-723 | 3 1/4" | 2 3/8" | 2 1/4" | 3 1/4" |
| 2 7/8" | IM-743 | 3 1/2" | 2 3/8" | 2 1/4" | 3 1/2" |
| 3" | IM-763 | 3 1/2" | 2 3/8" | 2 1/4" | 3 1/2" |
| 3 1/8" | IM-783 | 3 1/2" | 2 3/8" | 2 1/4" | 3 1/2" |
| 3 1/4" | IM-803 | 3 3/4" | 2 3/8" | 2 1/4" | 3 3/4" |
| 3 1/2" | IM-823 | 3 3/4" | 2 3/8" | 2 1/4" | 3 3/4" |
| 3 3/8" | IM-843 | 3 3/4" | 2 3/8" | 2 1/4" | 3 3/4" |
| 3 5/8" | IM-863 | 3 3/4" | 2 3/8" | 2 1/4" | 3 3/4" |
| 3 7/8" | IM-883 | 3 3/4" | 2 3/8" | 2 1/4" | 3 3/4" |
| 4" | IM-903 | 4" | 2 3/8" | 2 1/4" | 4" |
| 4 1/8" | IM-923 | 4" | 2 3/8" | 2 1/4" | 4" |
| 4 1/4" | IM-943 | 4 1/4" | 2 3/8" | 2 1/4" | 4 1/4" |
| 4 1/2" | IM-963 | 4 1/4" | 2 3/8" | 2 1/4" | 4 1/4" |
| 4 3/8" | IM-1003 | 4 3/4" | 2 3/8" | 3 3/8" | 4 3/4" |
| 4 7/8" | IM-1043 | 4 3/4" | 2 3/8" | 3 3/8" | 4 3/4" |
| 5" | IM-1123 | 4 3/4" | 2 3/8" | 3 3/8" | 4 3/4" |
| 5 1/8" | IM-1163 | 5" | 2 3/8" | 3 3/8" | 4 3/4" |

Locking Pins and Rings to fit above sockets are listed on page 23.

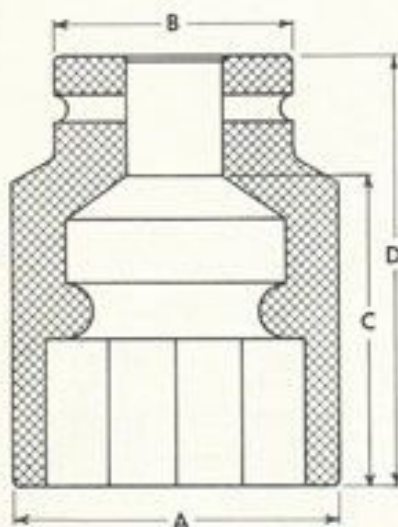


Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



A



B



C

INDUSTRIAL SOCKETS

1" Square Drive

POWER-IMPACT TYPE

For HEXAGON nuts

A BOLT CLEARANCE LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|-------------|--------------|------------------|--------------|------------------------|------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 3/8" | SIM-283 | 1 1/16" | 2 1/8" | 1 1/8" | 3" |
| 1/2" | SIM-303 | 1 3/16" | 2 3/8" | 1 3/8" | 3" |
| 1" | SIM-323 | 1 5/8" | 2 5/8" | 1 5/8" | 3" |
| 1 1/4" | SIM-343 | 1 7/8" | 2 7/8" | 1 7/8" | 3" |
| 1 1/2" | SIM-363 | 1 9/8" | 2 9/8" | 1 9/8" | 3" |
| 1 3/4" | SIM-383 | 1 11/8" | 2 11/8" | 1 11/8" | 3" |
| 1 7/8" | SIM-403 | 2 1/8" | 2 3/4" | 2 1/8" | 3 1/4" |
| 1 5/8" | SIM-423 | 2 1/8" | 2 3/4" | 2 1/8" | 3 1/4" |
| 1 3/4" | SIM-443 | 2 3/8" | 2 3/4" | 2 3/8" | 3 1/4" |
| 1 3/8" | SIM-463 | 2 3/8" | 2 3/4" | 2 3/8" | 3 1/4" |
| 1 1/2" | SIM-483 | 2 3/8" | 2 3/4" | 2 3/8" | 3 1/2" |
| 1 5/8" | SIM-503 | 2 3/8" | 2 3/4" | 2 3/8" | 3 1/2" |
| 1 3/4" | SIM-523 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/8" |
| 1 13/16" | SIM-543 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/8" |
| 1 3/4" | SIM-563 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/8" |
| 1 13/16" | SIM-583 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/8" |
| 1 3/8" | SIM-603 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/8" |
| 1 13/16" | SIM-623 | 3" | 2 3/8" | 2 3/8" | 4 1/8" |
| 2" | SIM-643 | 3" | 2 3/8" | 2 3/8" | 4 1/8" |
| 2 1/8" | SIP-663 | 3" | 2 3/4" | 2 3/8" | 3 3/8" |
| 2 1/8" | SIM-683 | 3 1/4" | 2 3/8" | 3 1/8" | 4 3/8" |
| 2 3/8" | SIM-703 | 3 1/4" | 2 3/8" | 3 1/8" | 4 3/8" |
| 2 3/4" | SIM-723 | 3 1/4" | 2 3/8" | 3 1/8" | 4 3/8" |
| 2 5/8" | SIM-743 | 3 1/2" | 2 3/8" | 3 1/8" | 4 1/2" |
| 2 3/4" | SIM-763 | 3 1/2" | 2 3/8" | 3 1/8" | 4 1/2" |

* This socket will be superseded by the SIM-663 as soon as present stocks are depleted. SIP series sockets are fitted with an internal locking ring and do not have the external groove of the SIM series as illustrated.

B LOCKING RINGS

IM-243R Locking Ring, synthetic rubber, fits all 1" square drive sockets up to and including the IM-463 (page 22), SIM-463 (above), IM-738 (page 24) and SIM-738 (page 25).

IM-483R Locking Ring, synthetic rubber, fits 1" square drive sockets IM-483 to IM-1163 (page 22), SIM-483 to SIM-763 (above), IM-740 to IM-788 (page 24) and SIM-740 to SIM-776 (page 25).

C LOCKING PINS

IM-243P Locking Pin, fits the same sizes as IM-243R above.

IM-483P Locking Pin, fits the same sizes as IM-483R above.

INDUSTRIAL SOCKETS

**1" Square Drive
POWER-IMPACT TYPE**

For SQUARE nuts

A STANDARD LENGTH SOCKETS

| Wrench Size | Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| | | Socket End A | Handle End B | | |
| SINGLE SQUARE SIZES | | | | | |
| 3/4" | IM-724 | 1 13/16" | 2 1/8" | 1 5/8" | 2 1/8" |
| 7/8" | IM-726 | 1 3/4" | 2 1/4" | 1 5/8" | 2 1/8" |
| 1" | IM-728 | 2 1/8" | 2 3/8" | 1 5/8" | 2 3/8" |
| 1 1/8" | IM-730 | 2 1/4" | 2 3/4" | 1 5/8" | 2 3/8" |
| 1 1/4" | IM-732 | 2 3/8" | 2 3/4" | 1 3/4" | 2 3/4" |
| 1 1/2" | IM-734 | 2 3/4" | 2 3/4" | 1 3/4" | 2 3/4" |
| 1 5/8" | IM-736 | 2 3/4" | 2 3/4" | 1 3/4" | 2 3/4" |

DOUBLE SQUARE SIZES

| | | | | | |
|--------|--------|--------|--------|--------|--------|
| 1 3/8" | IM-738 | 2 3/4" | 2 3/4" | 1 3/4" | 2 3/8" |
| 1 3/4" | IM-740 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-742 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-744 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-746 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-748 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-750 | 2 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-752 | 3 1/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-754 | 3 1/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-756 | 3 1/4" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-758 | 3 1/4" | 2 3/8" | 1 3/4" | 2 3/8" |
| 1 3/8" | IM-760 | 3 3/8" | 2 3/8" | 1 3/4" | 2 3/8" |
| 2" | IM-764 | 3 3/8" | 2 3/8" | 1 3/4" | 3 3/8" |
| 2 1/4" | IM-766 | 3 3/8" | 2 3/8" | 1 3/4" | 3 3/8" |
| 2 1/8" | IP-768 | 3 3/4" | 2 3/4" | 1 3/2" | 2 3/4" |
| 2 3/8" | IM-770 | 3 3/8" | 2 3/8" | 2 3/8" | 3 3/4" |
| 2 1/4" | IM-772 | 3 3/8" | 2 3/8" | 2 3/8" | 3 3/4" |
| 2 3/8" | IM-776 | 4 3/8" | 2 3/8" | 2 3/8" | 3 3/2" |
| 2 3/4" | IM-788 | 4 3/4" | 2 3/8" | 2 3/8" | 3 3/4" |

* This socket will be superseded by the IM type as soon as present stock is depleted. The IP-768 socket is fitted with an internal locking ring and does not have the external groove of the IM series as illustrated.

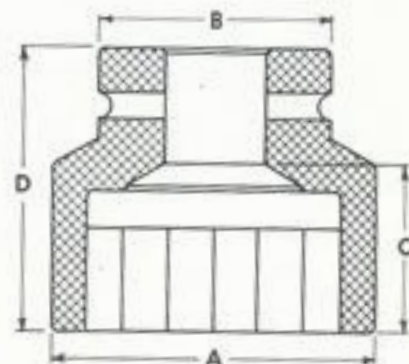
Locking Pins and Rings to fit above sockets are listed on page 23.

Snap-on Tools

**FOR PRODUCTION
AND MAINTENANCE**



A

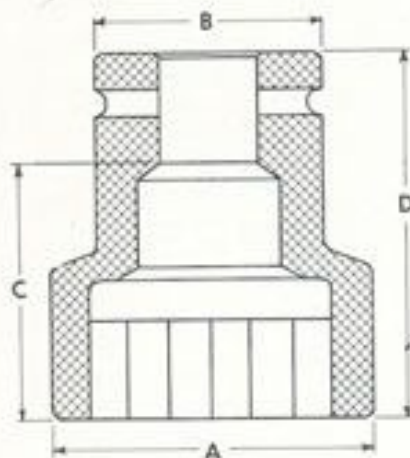


Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



A



INDUSTRIAL SOCKETS

1" Square Drive

POWER-IMPACT TYPE

For **SQUARE** nuts

A BOLT CLEARANCE LENGTH SOCKETS

| Wrench Size | Stock Number | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|---------------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| | | Socket End A | Handle End B | | |
| SINGLE SQUARE SIZES | | | | | |
| 3/8" | SIM-728 | 1 1/8" | 2 3/8" | 1 3/8" | 3" |
| 1" | SIM-732 | 2 3/8" | 2 3/8" | 1 3/8" | 3" |
| 1 1/8" | SIM-734 | 2 3/8" | 2 3/8" | 1 3/8" | 3" |
| 1 3/8" | SIM-736 | 2 3/8" | 2 3/8" | 1 3/8" | 3 1/8" |
| DOUBLE SQUARE SIZES | | | | | |
| 1 3/8" | SIM-738 | 2 3/8" | 2 3/8" | 1 3/8" | 3 3/8" |
| 1 1/4" | SIM-740 | 2 3/8" | 2 3/8" | 1 3/8" | 3 3/8" |
| 1 3/4" | SIM-742 | 2 3/8" | 2 3/8" | 2 3/8" | 3 3/4" |
| 1 3/8" | SIM-744 | 2 3/8" | 2 3/8" | 2 3/8" | 3 3/4" |
| 1 3/8" | SIM-746 | 2 3/8" | 2 3/8" | 2 3/8" | 3 3/4" |
| 1 1/2" | SIM-748 | 2 3/8" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/4" | SIM-750 | 2 3/8" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/8" | SIM-752 | 2 3/8" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/4" | SIM-754 | 3 1/8" | 2 3/8" | 2 3/8" | 3 3/8" |
| 1 3/4" | SIM-756 | 3 1/8" | 2 3/8" | 2 3/8" | 3 3/8" |
| 1 3/4" | SIM-758 | 3 3/8" | 2 3/8" | 2 3/8" | 3 3/8" |
| 1 7/8" | SIM-760 | 3 3/8" | 2 3/8" | 2 3/8" | 3 3/8" |
| 2" | SIM-764 | 3 3/8" | 2 3/8" | 2 3/8" | 4 1/8" |
| 2 1/8" | SIM-766 | 3 3/8" | 2 3/8" | 2 3/8" | 4 1/8" |
| 2 3/8" | SIM-768 | 3 3/8" | 2 3/8" | 3 1/8" | 4 1/4" |
| 2 3/4" | SIM-770 | 3 3/8" | 2 3/8" | 3 1/8" | 4 1/4" |
| 2 1/4" | SIM-772 | 3 3/8" | 2 3/8" | 3 1/8" | 4 1/4" |
| 2 3/8" | SIM-776 | 4 1/8" | 2 3/8" | 3 1/8" | 4 1/2" |

Locking Pins and Rings to fit above sockets are listed on page 23.

INDUSTRIAL SOCKETS

1-1/2" Square Drive

POWER-IMPACT TYPE

For HEXAGON nuts

A STANDARD LENGTH SOCKETS

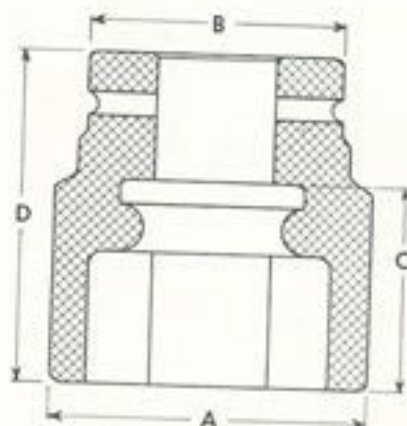
| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 1 3/8" | IM-445 | 2 3/8" | 3 3/4" | 1 1/2" | 3 3/4" |
| 1 3/8" | IM-465 | 2 3/8" | 3 3/4" | 1 1/2" | 3 3/4" |
| 1 1/2" | IM-485 | 2 3/4" | 3 3/4" | 1 1/2" | 3 3/4" |
| 1 3/4" | IM-505 | 2 3/4" | 3 3/4" | 1 1/2" | 3 3/4" |
| 1 3/4" | IM-525 | 3" | 3 3/4" | 1 3/4" | 3 3/4" |
| 1 3/4" | IM-545 | 3" | 3 3/4" | 1 3/4" | 3 3/4" |
| 1 3/4" | IM-565 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 1 3/4" | IM-585 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 1 3/4" | IM-605 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 1 3/4" | IM-625A | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 2" | IM-645 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 2 1/4" | IM-665 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 2 1/4" | IM-685 | 3 1/4" | 3 3/4" | 1 3/4" | 3 3/4" |
| 2 1/4" | IM-705 | 3 1/2" | 3 3/4" | 2" | 3 3/4" |
| 2 1/4" | IM-725A | 3 3/4" | 3 3/4" | 2" | 3 3/4" |
| 2 3/4" | IM-745 | 3 3/4" | 3 3/4" | 2 1/4" | 3 3/4" |
| 2 3/4" | IM-765 | 3 3/4" | 3 3/4" | 2 1/4" | 3 3/4" |
| 2 3/4" | IM-785 | 3 3/4" | 3 3/4" | 2 1/4" | 3 3/4" |
| 2 3/4" | IM-805 | 4" | 3 3/4" | 2 3/4" | 4" |
| 2 3/4" | IM-825 | 4" | 3 3/4" | 2 3/4" | 4" |
| 2 3/4" | IM-845 | 4 1/4" | 3 3/4" | 2 3/4" | 4 1/4" |
| 2 3/4" | IM-865 | 4 1/4" | 3 3/4" | 2 3/4" | 4 1/4" |
| 2 3/4" | IM-885 | 4 1/4" | 3 3/4" | 2 3/4" | 4 1/4" |
| 2 3/4" | IM-905 | 4 1/2" | 3 3/4" | 2 3/4" | 4 1/4" |
| 2 3/4" | IM-925 | 4 1/2" | 3 3/4" | 2 3/4" | 4 1/4" |
| 2 3/4" | IM-945 | 4 1/2" | 3 3/4" | 2 3/4" | 4 1/4" |
| 3" | IM-965 | 4 3/4" | 3 3/4" | 2 3/4" | 4 3/4" |
| 3 1/4" | IM-985 | 4 3/4" | 3 3/4" | 2 3/4" | 4 3/4" |
| 3 1/4" | IM-1005 | 4 3/4" | 3 3/4" | 2 3/4" | 4 3/4" |
| 3 1/4" | IM-1025 | 4 3/4" | 3 3/4" | 3" | 4 3/4" |
| 3 1/4" | IM-1045 | 5" | 3 3/4" | 3 1/4" | 4 3/4" |
| 3 1/4" | IM-1065 | 5" | 3 3/4" | 3 1/4" | 4 3/4" |
| 3 1/4" | IM-1085 | 5" | 3 3/4" | 3 1/4" | 4 3/4" |
| 3 1/4" | IM-1105 | 5" | 3 3/4" | 3 1/4" | 4 3/4" |
| 3 1/2" | IM-1125 | 5 1/4" | 3 3/4" | 3 3/4" | 5" |
| 3 1/2" | IM-1145 | 5 1/4" | 3 3/4" | 3 3/4" | 5" |
| 3 1/2" | IM-1165 | 5 1/4" | 3 3/4" | 3 3/4" | 5" |
| 3 1/2" | IM-1185 | 5 1/2" | 3 3/4" | 3 3/4" | 5 1/4" |
| 3 1/2" | IM-1205 | 5 1/2" | 3 3/4" | 3 3/4" | 5 1/4" |
| 3 1/2" | IM-1225 | 5 1/2" | 3 3/4" | 3 3/4" | 5 1/4" |
| 3 1/2" | IM-1245 | 5 1/2" | 3 3/4" | 3 3/4" | 5 1/4" |
| 3 1/2" | IM-1265 | 5 3/4" | 3 3/4" | 3 3/4" | 5 1/2" |
| 4" | IM-1285 | 5 3/4" | 3 3/4" | 3 3/4" | 5 1/2" |
| 4 1/4" | IM-1305 | 5 3/4" | 3 3/4" | 3 3/4" | 5 1/2" |
| 4 1/4" | IM-1325 | 6" | 3 3/4" | 4" | 5 3/4" |
| 4 1/4" | IM-1345 | 6" | 3 3/4" | 4" | 5 3/4" |
| 4 1/4" | IM-1365 | 6" | 3 3/4" | 4" | 5 3/4" |
| 4 1/4" | IM-1385 | 6 1/4" | 3 3/4" | 4 1/2" | 5 3/4" |
| 4 1/4" | IM-1405 | 6 1/4" | 3 3/4" | 4 1/2" | 5 3/4" |
| 4 1/4" | IM-1425 | 6 1/4" | 3 3/4" | 4 1/2" | 5 3/4" |
| 4 1/2" | IM-1445 | 6 1/4" | 3 3/4" | 4 1/2" | 5 3/4" |
| 4 1/2" | IM-1465 | 6 1/2" | 3 3/4" | 4 3/4" | 6" |
| 4 1/2" | IM-1485 | 6 1/2" | 3 3/4" | 4 3/4" | 6" |
| 4 3/4" | IM-1525 | 6 1/2" | 3 3/4" | 4 3/4" | 6" |

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



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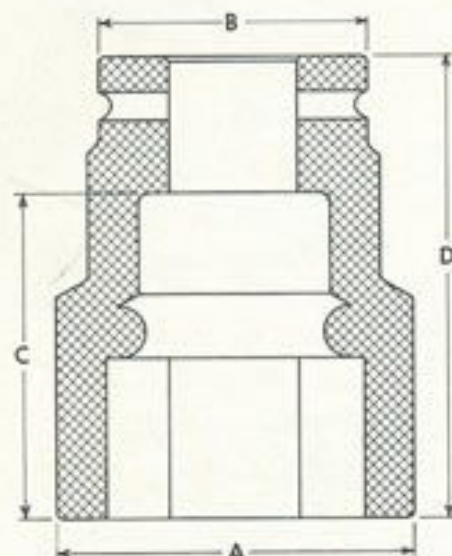


Snap-on Tools

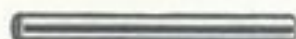
SERVING INDUSTRY
EVERYWHERE



A



B



C

INDUSTRIAL SOCKETS

1-1/2" Square Drive

POWER-IMPACT TYPE

For HEXAGON nuts

A BOLT CLEARANCE LENGTH SOCKETS

| SINGLE HEX | | Outside Diameter | | Bolt Clearance Depth C | Overall Length D |
|----------------|-----------------|--------------------|--------------------|---------------------------------|------------------------|
| Wrench Size | Stock Number | Socket End A | Handle End B | | |
| 1 3/8" | SIM-445 | 2 3/8" | 3 1/4" | 2 1/4" | 3 3/8" |
| 1 3/4" | SIM-465 | 2 3/8" | 3 1/4" | 2 1/4" | 3 3/8" |
| 1 3/4" | SIM-485 | 2 3/8" | 3 1/4" | 2 1/4" | 3 3/8" |
| 1 3/4" | SIM-505 | 2 3/8" | 3 1/4" | 2 1/2" | 4 1/8" |
| 1 3/4" | SIM-525 | 3" | 3 1/4" | 2 1/2" | 4 1/8" |
| 1 3/4" | SIM-545 | 3" | 3 1/4" | 2 1/2" | 4 1/8" |
| 1 3/4" | SIM-565 | 3" | 3 1/4" | 2 1/2" | 4 1/8" |
| 1 3/4" | SIM-585 | 3" | 3 1/4" | 2 3/4" | 4 3/8" |
| 1 3/4" | SIM-605 | 3 1/4" | 3 1/4" | 2 3/4" | 4 3/8" |
| 1 3/4" | SIM-625A | 3 1/4" | 3 1/4" | 2 3/4" | 4 3/8" |
| 2" | SIM-645 | 3 1/4" | 3 1/4" | 3 1/8" | 4 3/4" |
| 2 1/8" | SIM-665 | 3 1/4" | 3 1/4" | 3 1/8" | 4 3/4" |
| 2 1/8" | SIM-685 | 3 1/4" | 3 1/4" | 3 1/8" | 4 3/4" |
| 2 1/8" | SIM-705 | 3 1/2" | 3 1/4" | 3 3/8" | 5" |
| 2 1/4" | SIM-725 | 3 3/4" | 3 1/4" | 3 3/8" | 5" |
| 2 3/8" | SIM-745 | 3 3/4" | 3 1/4" | 3 3/8" | 5" |
| 2 3/8" | SIM-765 | 3 3/4" | 3 1/4" | 3 3/8" | 5" |
| 2 3/8" | SIM-785 | 3 3/4" | 3 1/4" | 3 3/8" | 5" |
| 2 3/8" | SIM-805 | 4" | 3 3/4" | 3 3/8" | 5 1/8" |
| 2 3/8" | SIM-825 | 4" | 3 3/4" | 3 3/8" | 5 1/8" |
| 2 3/8" | SIM-845 | 4" | 3 3/4" | 3 3/8" | 5 1/8" |
| 2 3/8" | SIM-865 | 4 1/4" | 3 3/4" | 4" | 5 3/8" |
| 2 3/8" | SIM-885 | 4 1/4" | 3 3/4" | 4" | 5 3/8" |
| 2 3/8" | SIM-905 | 4 1/2" | 3 3/4" | 4" | 5 3/8" |
| 2 3/8" | SIM-925 | 4 1/2" | 3 3/4" | 4" | 5 3/8" |
| 2 3/8" | SIM-945 | 4 1/2" | 3 3/4" | 4 1/4" | 5 3/8" |
| 3" | SIM-965 | 4 3/4" | 3 3/4" | 4 1/4" | 5 3/8" |
| 3 1/8" | SIM-985 | 4 3/4" | 3 3/4" | 4 1/4" | 5 3/8" |
| 3 1/8" | SIM-1005 | 4 3/4" | 3 3/4" | 4 1/2" | 6 1/8" |
| 3 1/8" | SIM-1025 | 4 3/4" | 3 3/4" | 4 1/2" | 6 1/8" |
| 3 1/8" | SIM-1045 | 5" | 3 3/4" | 4 1/2" | 6 1/8" |
| 3 1/8" | SIM-1065 | 5" | 3 3/4" | 4 3/4" | 6 3/8" |
| 3 1/8" | SIM-1085 | 5" | 3 3/4" | 4 3/4" | 6 3/8" |
| 3 1/8" | SIM-1105 | 5" | 3 3/4" | 4 3/4" | 6 3/8" |
| 3 1/2" | SIM-1125 | 5 1/8" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1145 | 5 1/8" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1165 | 5 1/8" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1185 | 5 1/2" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1205 | 5 1/2" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1225 | 5 1/2" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1245 | 5 1/2" | 3 3/4" | 5 1/8" | 6 3/4" |
| 3 1/2" | SIM-1265 | 5 3/4" | 3 3/4" | 5 3/4" | 7 1/4" |
| 4" | SIM-1285 | 5 3/4" | 3 3/4" | 5 3/4" | 7 1/4" |
| 4 1/8" | SIM-1305 | 5 3/4" | 3 3/4" | 5 3/4" | 7 1/4" |
| 4 1/8" | SIM-1325 | 6" | 3 3/4" | 5 3/4" | 7 1/4" |
| 4 1/8" | SIM-1345 | 6" | 3 3/4" | 5 3/4" | 7 1/4" |
| 4 1/8" | SIM-1365 | 6" | 3 3/4" | 6 1/4" | 7 3/4" |
| 4 1/8" | SIM-1385 | 6 1/4" | 3 3/4" | 6 1/4" | 7 3/4" |
| 4 1/8" | SIM-1405 | 6 1/4" | 3 3/4" | 6 1/4" | 7 3/4" |
| 4 1/8" | SIM-1445 | 6 1/4" | 3 3/4" | 6 1/4" | 7 3/4" |
| 4 1/8" | SIM-1485 | 6 1/2" | 3 3/4" | 6 3/8" | 8" |
| 4 3/4" | SIM-1525 | 6 1/2" | 3 3/4" | 6 3/8" | 8" |

LOCKING RING AND PIN

B IM-445R Locking ring, synthetic rubber, fits all 1 1/2" square drive sockets.

C IM-445P Locking pin, fits all 1 1/2" square drive sockets.

Snap-on ELECTRIC IMPACT WRENCH

For Industrial Nut and Screw Turning, Tapping, Drilling, Stud Pulling, etc.

DELIVERS UP TO 2000 POWERFUL ROTARY BLOWS PER MINUTE—THE MOTOR RUNS CONTINUOUSLY UNDER ALL CONDITIONS AND CANNOT STALL OR BE BURNED OUT BECAUSE OF OVERLOAD

1/2 Inch Square Drive



YOU GET ALL THESE SUPERIOR FEATURES IN YOUR Snap-on ELECTRIC IMPACT WRENCH

- A. Entire tool is quickly disassembled with screw driver for lubrication or service.
- B. Housing is heavy die cast polished aluminum to give maximum strength and ruggedness.
- C. Hammer, anvil, and planetary gear cage are forged from specially selected alloy steels, hardened and tempered through controlled heat treatment.
- D. 1/2" square drive is milled onto the spindle of the forged anvil.
- E. Sockets and attachments are held onto the square drive by means of a spring backed friction pin.
- F. Gears have induction hardened teeth to give wear resistance and durability for long service life.
- G. Grease sealed ball bearings used on the armature eliminate need of periodic lubrication in this part of tool.
- H. Powerful fan and large louvres provide ventilation.
- I. Rotary impact action is powered by a rugged, powerful motor rated at 3.5 Amps., full load. It runs continuously under any and all conditions . . . cannot be overloaded and stalled or burned out. As soon as the drive spindle torque load builds to a certain point the rotary action is transformed, through the impact mechanism, into 2000 sharp, powerful blows per minute delivered to the anvil end of the drive

spindle. Blows become heavier as the torque load increases . . . thus the larger or tighter the nut the heavier the turning impact it receives. None of the hammer shock is transmitted to the operator.

- J. Forward and reverse positions are very clearly marked.
- K. Twisting the end cap reverses the direction of the tool and automatically shifts position of brushes to give best possible commutator contact for most efficient operation.
- L. Reversing switch is simple in design with stationary and movable contacts mounted on non-erasing plastic base, sealed against dirt with plastic cap. Wiring connections are made without nuts or screws and will not work loose.
- M. Spirally coiled beryllium copper springs permit use of long, heavy duty carbon brushes.
- N. The oversized 12 Amp. "on-off" trigger switch is built to give long service.
- O. Comfortable finger-fit grip handle.
- P. Heavy molded strain reliever protects cord against shocks and fraying.
- Q. 25 Feet of Neoprene sheathed cord greatly reduces need for troublesome extensions. Cord has ground wire with a special quick break connection. A tug hard enough to disconnect the cord from power outlet will also unsnap the ground wire.

2 MODELS

EW-500 115 Volts
EW-502 220/230 Volts

Specifications:

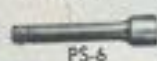
MOTOR: Universal—AC-DC 25/60 Cycles, Single Phase.
VOLTAGES: 115 Volt, 220/230 Volt.
AMPERES: Conservative rating 3 1/2 amps.
SPEED: 1900 R.P.M. No Load—Forward or Reverse.
IMPACTS: 2000 per minute.
LENGTH: 10 1/4 inches overall.
DIAMETER: 3 1/4" at widest part of wrench.
CLEARANCE: Top of wrench to center of spindle is only 1 1/2". The wrench can be used in very close places.
BALANCE: The length and weight are well balanced on the handle making the wrench easy to use without tiring the arm and hand.
CORD: 25 feet of Heavy Duty Neoprene Sheathed Type S.
WEIGHT: Net without cord 6 1/2 lbs., shipping weight with cord 11 1/4 lbs.



IMPACT WRENCH SETS AND ACCESSORY TOOLS



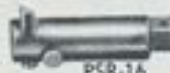
EW-500



PS-6



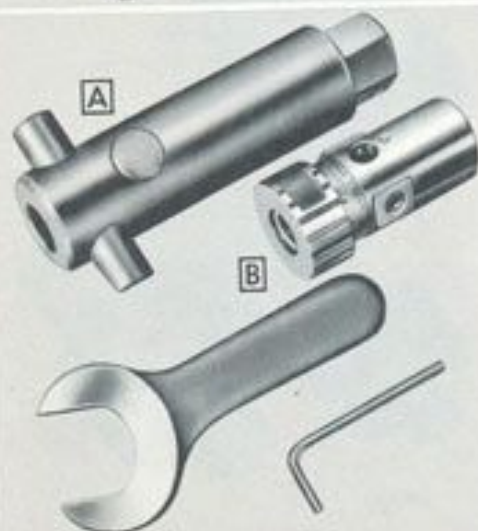
IMH-8



PSR-16



KRD-160A



331A-EW-B IMPACT WRENCH SET

Includes the EW-500 impact wrench, a complete range of socket sizes in standard and bolt clearance lengths and other units as listed below and illustrated at the left.

| Stock No. | Description | Stock No. | Description |
|-----------|-------------------------------|------------|-------------------------------|
| EW-500 | Impact Wrench | P-280 | 3/8" Standard Length Socket |
| PSR-16 | Stud Remover | P-300 1/2 | 13/16" Standard Length Socket |
| IMH-8 | Universal Joint | P-320 1/2 | 1" Standard Length Socket |
| PS-6 | 5" Extension Bar | P-340 1/2 | 1 1/4" Standard Length Socket |
| PSW-284 | 3/8" Blade Screwdriver | SP-120 | 3/8" Bolt Clearance Socket |
| PSW-325 | 1/2" Blade Screwdriver | SP-140 | 7/8" Bolt Clearance Socket |
| PSP-32 | No. 3 Phillips Driver | SP-160 | 1 1/2" Bolt Clearance Socket |
| PSP-42 | No. 4 Phillips Driver | SP-180 | 1 3/4" Bolt Clearance Socket |
| P-120 | 3/8" Standard Length Socket | SP-200 | 2" Bolt Clearance Socket |
| P-140 | 7/8" Standard Length Socket | SP-220 | 2 1/4" Bolt Clearance Socket |
| P-160 | 1" Standard Length Socket | SP-240 | 2 3/4" Bolt Clearance Socket |
| P-180 | 1 1/4" Standard Length Socket | SP-260 | 3" Bolt Clearance Socket |
| P-200 | 1 3/8" Standard Length Socket | SP-280 | 3 1/2" Bolt Clearance Socket |
| P-220 | 1 1/2" Standard Length Socket | SP-300 1/2 | 4" Bolt Clearance Socket |
| P-240 | 1 3/4" Standard Length Socket | SP-320 1/2 | 4 1/2" Bolt Clearance Socket |
| P-260 | 2" Standard Length Socket | KRD-160A | Metal Box |

331A-EW Set. Above set without the metal box.

314-EW-B IMPACT WRENCH SET

Includes the EW-500 impact wrench, IMH-8 and the twelve standard length sockets listed below and illustrated at the left.

| Stock No. | Description | Stock No. | Description |
|-----------|-------------------------------|-----------|-------------------------------|
| EW-500 | Impact Wrench | P-240 | 3/4" Standard Length Socket |
| IMH-8 | Universal Joint | P-260 | 13/16" Standard Length Socket |
| P-120 | 3/8" Standard Length Socket | P-280 | 7/8" Standard Length Socket |
| P-140 | 7/8" Standard Length Socket | P-300 1/2 | 1 1/4" Standard Length Socket |
| P-160 | 1" Standard Length Socket | P-320 1/2 | 1 1/2" Standard Length Socket |
| P-180 | 1 1/4" Standard Length Socket | P-340 1/2 | 1 3/4" Standard Length Socket |
| P-200 | 1 3/8" Standard Length Socket | KRD-160A | Metal Box |
| P-220 | 1 1/2" Standard Length Socket | | |

314-EW Set. Above set without the metal box.

A IMPACT STUD REMOVER

PSR-16 Impact Stud Remover. While designed with 1/2" female drive for use with the SNAP-ON impact wrench, this tool also has a hex milled on top so that it can be turned with any 1" wrench. The wedge-action principle grips tighter as pressure is applied and handles studs from 3/8" to 3/4" in diameter. A knurled screw holds the wedge inside of the housing to prevent its loss when the tool is not being used. Outside diameter 1 3/8", overall length 5 1/2".

B COLLET TYPE CHUCK

EW-441 Collet Type Chuck. This 1/2" square drive unit adapts your impact wrench for tapping and drilling use. The steel bladed rubber-flex collet included has a drill capacity of 3/8" to 3/4" and a tap capacity of No. 10 to 1/2". An additional clamp arrangement at the base of the chuck holds the square drive of the tap so it cannot turn in the chuck during the operation. A 1 3/8" wrench to tighten the collet portion of the chuck and a 3/2" hex head wrench to tighten the tap clamp are included with the tool. An additional collet which is available on special order increases the size range of the unit to include 1/4" to 1/2" drill capacity or 3/8" to 3/4" tap capacity. Outside diameter 1 3/8", overall length 3 3/4".

EW-441-1 Standard Collet. No. 10 to 1/2" tap capacity, 3/8" to 3/4" drill capacity.

EW-441-6 Special Collet. 3/8" to 3/4" tap capacity, 1/4" to 1/2" drill capacity.

INDUSTRIAL RATCHETS

FITTED WITH LOCKING BUTTON

1/4" SQUARE DRIVE

| Stock No. | Head Depth A | Head Width B | Overall Length |
|-----------|-----------------|-----------------|----------------|
| A PGM-70M | 3/8" | 1 1/16" | 4 13/32" |

9/32" SQUARE DRIVE

| Stock No. | Head Depth A | Head Width B | Overall Length |
|-----------|-----------------|-----------------|----------------|
| A PM-70M | 3/8" | 1 3/16" | 4 13/32" |

3/8" SQUARE DRIVE

| Stock No. | Head Depth A | Head Width B | Overall Length |
|-----------|-----------------|-----------------|----------------|
| A PF-70M | 3/8" | 1 3/8" | 6 13/16" |
| B PF-87 | 3/8" | 1 3/8" | 6 1/2" |


1/2" SQUARE DRIVE

| Stock No. | Head Depth A | Head Width B | Overall Length |
|-----------|-----------------|-----------------|----------------|
| C P-71M | 3/4" | 1 7/16" | 9 3/4" |

5/8" SQUARE DRIVE

| COMPLETE TOOL | | HEAD ONLY | | | | HANDLE ONLY | |
|---|----------------|--------------|-------------|--------------|--------------|--------------|-----------------|
| Stock Number | Overall Length | Stock Number | Head Length | Head Depth A | Head Width B | Stock Number | Handle Diameter |
|  P-74N | 24" | P-74NA | 6 1/16" | 1 1/8" | 2 3/16" | L-72H | 1 3/8" |

3/4" SQUARE DRIVE

| COMPLETE TOOL | | HEAD ONLY | | | | HANDLE ONLY | |
|---|----------------|--------------|-------------|------------------|--------------|--------------|-----------------|
| Stock Number | Overall Length | Stock Number | Head Length | Head Thickness A | Head Width B | Stock Number | Handle Diameter |
|  GL-72SH | 24" | GL-72S | 6 1/16" | 1 1/8" | 2 3/16" | GL-72H | 1 3/8" |

1" SQUARE DRIVE (Cadmium Plated)

| COMPLETE TOOL | | HEAD ONLY | | | | HANDLE ONLY | |
|---------------|----------------|--------------|---------------------|-------------------|-------------------|--------------|-------------------|
| Stock Number | Overall Length | Stock Number | Head Length | Head Thickness A | Head Width B | Stock Number | Handle Diameter |
| E L-73 | 35" | L-73A | 7 $\frac{13}{16}$ " | 1 $\frac{3}{8}$ " | 3 $\frac{1}{8}$ " | L-53H | 1 $\frac{3}{8}$ " |

1 1/2" SQUARE DRIVE

| COMPLETE TOOL | | HEAD ONLY | | | | HANDLE ONLY | |
|---------------|----------------|--------------|-----------------------------------|---------------------------------|----------------------------------|--------------|---------------------------------|
| Stock Number | Overall Length | Stock Number | Head Length | Head Depth A | Head Width B | Stock Number | Handle Diameter |
| E L-78 | 42" | L-78Y | 9 ³¹ / ₃₂ " | 1 ³ / ₄ " | 4 ¹ / ₁₆ " | L-55B | 1 ³ / ₈ " |

RATCHET ADAPTORS

3/4" SQUARE DRIVE

| Stock Number | Outside Diameter | Overall Length |
|--------------|------------------|----------------|
| F GL-672A | 2 1/2" | 3 3/4" |

1" SQUARE DRIVE

| Stock Number | Outside Diameter | Overall Length |
|--------------|------------------|----------------|
| G GL-673 | 3 1/4" | 5" |

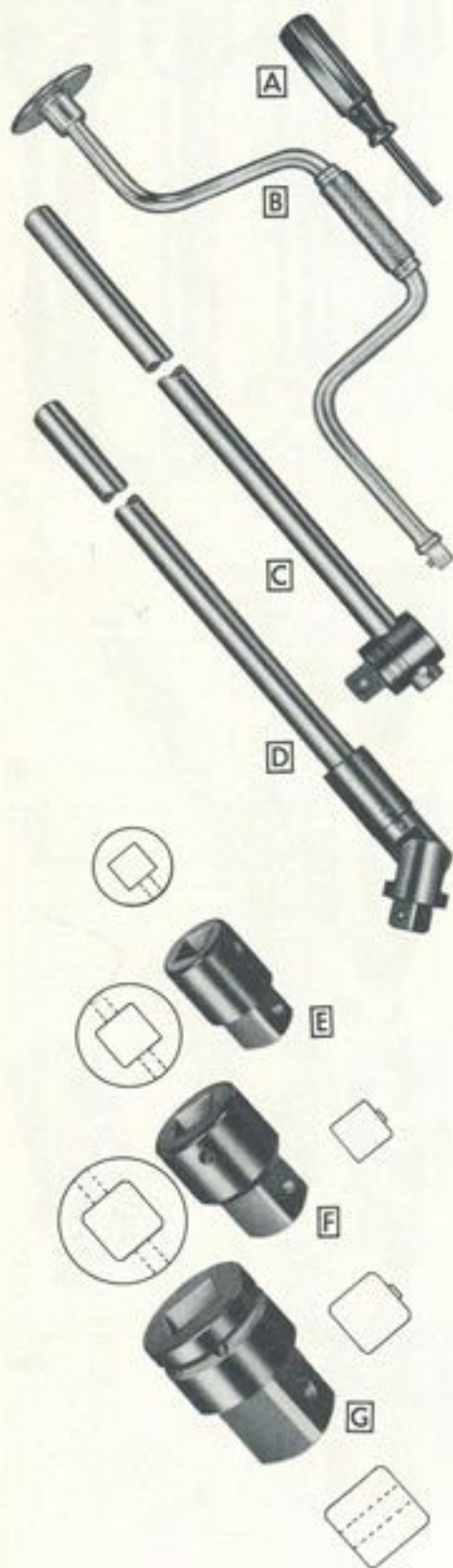
Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



INDUSTRIAL HANDLES

FITTED WITH LOCKING BUTTON

A PLASTIC HANDLE SOCKET DRIVERS

| Stock Number | Square Drive | Shank Length | Overall Length |
|--------------|--------------|--------------|----------------|
| GM-4 | 3/4" | 2" | 5 3/4" |
| PM-4 | 5/8" | 1 1/8" | 5 1/8" |

B SPEEDER HANDLES

| Stock Number | Square Drive | Shank Diameter | Shank Length | Overall Length | Sweep Radius |
|--------------|--------------|----------------|--------------|----------------|--------------|
| A-2013 | 3/8" | 1/2" | 4 1/4" | 14 3/8" | 4 1/8" |
| A-2022 | 3/8" | 1/2" | 10 1/4" | 20 3/8" | 4 1/8" |
| A-2001 | 1/2" | 3/4" | 4 1/4" | 14 3/8" | 4 1/8" |
| A-2002 | 1/2" | 1/2" | 6 1/4" | 16 3/8" | 4 1/8" |
| A-2003 | 1/2" | 1/2" | 8 1/4" | 18 3/8" | 4 1/8" |
| A-2004 | 1/2" | 1/2" | 10 1/4" | 20 3/8" | 4 1/8" |

C SLIDING TEE HANDLES

| COMPLETE TOOL | | | | HEAD ONLY | | HANDLE ONLY | |
|---------------|--------------|----------------|-----------------|--------------|--------------|-------------|----------|
| Stock Number | Square Drive | Overall Length | Handle Diameter | Stock Number | Stock Number | Length | Diameter |
| GL-52BH | 3/4" | 21 1/2" | 1 1/4" | GL-52B | GL-72H | 20" | 1 3/8" |
| L-53 | 1" | 30" | 1 3/8" | L-53A | L-53H | 30" | 1 3/8" |
| L-55 | 1 1/2" | 36" | 1 3/8" | L-55A | L-55H | 36" | 1 3/8" |

D NUT SPINNER HANDLE

| COMPLETE TOOL | | HEAD ONLY | | | HANDLE ONLY | | |
|---------------|----------------|--------------|--------------|------------|--------------|---------------|-----------------|
| Stock Number | Overall Length | Stock Number | Square Drive | Head Width | Stock Number | Handle Length | Handle Diameter |
| GL-1120H | 21 1/2" | GL-1120 | 3/4" | 1 1/8" | GL-72H | 20" | 1 3/8" |

E F AND G HANDLE ADAPTORS

| Stock Number | Square Drive | | Outside Diameter | Overall Length |
|--------------|--------------|----------|------------------|----------------|
| | Female End | Male End | | |
| E PA-2 | 3/8" | 1/2" | 1 3/8" | 1 3/8" |
| E PA-4 | 1/2" | 3/4" | 1 3/8" | 1 3/8" |
| E PHD-1 | 1/2" | 3/4" | 1" | 1 3/8" |
| F PHD-2 | 3/8" | 1/2" | 1 1/4" | 1 5/8" |
| F IM-34 | 3/8" | 3/4" | 1 3/8" | 1 3/8" |
| F IM-52 | 3/4" | 3/4" | 1 3/8" | 1 3/8" |
| G IM-72 | 3/4" | 1" | 1 3/8" | 2 3/4" |
| G IM-124 | 1" | 3/4" | 2 3/8" | 2 3/8" |
| G IM-35 | 1" | 1 1/2" | 2 3/4" | 3 1/2" |
| G IM-53 | 1 1/2" | 1" | 3 1/4" | 4 1/4" |

INDUSTRIAL HANDLES

POWER AND IMPACT TYPES

A AND B POWER EXTENSION BARS

Fitted with locking button

| Stock Number | Square Drive | Shank Diameter | Overall Length |
|--------------|--------------|----------------|----------------|
| A PF-2 | 3/8" | 3/8" | 3" |
| A PF-6 | 3/8" | 3/8" | 6" |
| A PF-11 | 3/8" | 3/8" | 12" |
| A PS-2 | 1/2" | 5/16" | 2" |
| A PS-6 | 1/2" | 5/16" | 5" |
| A PS-12 | 1/2" | 5/16" | 10" |
| B PHD-6 | 3/8" | 13/16" | 6" |
| B PHD-12 | 3/8" | 13/16" | 12" |
| B L-105 | 1 1/2" | 1 1/8" | 10" |
| B L-205 | 1 1/2" | 1 1/8" | 20" |

C STANDARD EXTENSION BARS

Black Finish—With locking button

| Stock Number | Square Drive | Shank Diameter | Overall Length |
|--------------|--------------|----------------|----------------|
| GL-32 | 3/4" | 1 1/4" | 3" |
| GL-62 | 3/4" | 1 1/4" | 8" |
| GL-122 | 3/4" | 1 1/4" | 16" |

D IMPACT EXTENSION BARS

| Stock Number | Square Drive | Shank Diameter | Overall Length |
|--------------|--------------|----------------|----------------|
| IM-62 | 3/4" | 1" | 7" |
| IM-92 | 3/4" | 1" | 10" |
| IM-122 | 3/4" | 1" | 13" |

The following three Extension Bars have a hole instead of a locking button in the male square drive.

| | | | |
|--------|----|--------|---------|
| IM-63 | 1" | 1 1/4" | 7 1/2" |
| IM-93 | 1" | 1 1/4" | 10 1/2" |
| IM-123 | 1" | 1 1/4" | 13 1/2" |

E POWER UNIVERSAL JOINTS

Fitted with locking button

| Stock Number | Square Drive | Outside Diameter | Overall Length |
|--------------|--------------|------------------|----------------|
| PFU-8 | 3/8" | 3/4" | 1 1/2" |
| PU-8C | 1/2" | 1 1/8" | 2 1/2" |

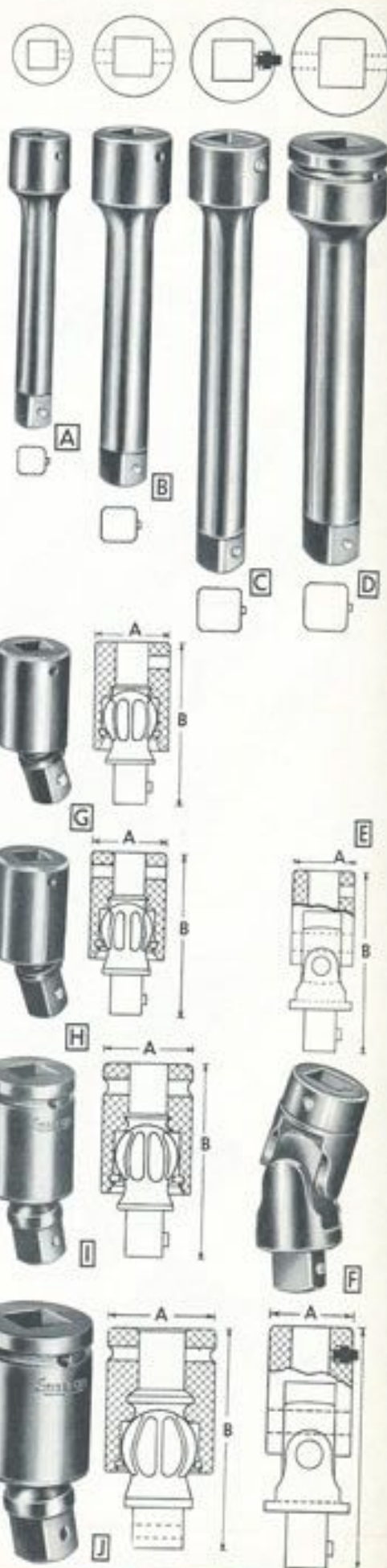
F STANDARD UNIVERSAL JOINT

Black Finish—With locking button

| Stock Number | Square Drive | Outside Diameter | Overall Length |
|--------------|--------------|------------------|----------------|
| GL-82 | 3/4" | 1 1/4" | 4 1/8" |

G H I AND J BALL TYPE UNIVERSAL JOINTS

| Stock Number | Square Drive | Outside Diameter A | Overall Length B |
|--------------|--------------|--------------------|------------------|
| G IMH-8 | 1/2" | 1 1/4" | 2 3/8" |
| H IMH-81 | 5/8" | 1 3/8" | 3 3/8" |
| I IMH-82A | 3/4" | 1 3/4" | 3 3/4" |
| J IMH-83A | 1" | 2 1/8" | 4 3/4" |
| J IMH-85 | 1 1/2" | 3 1/4" | 5 3/4" |



Snap-on Tools

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INDUSTRIAL HANDLES

1/2" Square Drive

SPRING AND BALL LOCKING DEVICE

The handles shown on this page are standard units for hand operation only. All are equipped with the spring and ball type of locking device and all have a black finish with the exception of the 71-M Ratchet which is zinc plated.

A RATCHET

| Stock Number | Head Depth | Head Width | Overall Length |
|--------------|------------|------------|----------------|
| 71M | 3/4" | 1 15/16" | 9 3/8" |

B SPEEDER

| Stock Number | Shank Diameter | Shank Length | Sweep Radius | Overall Length |
|--------------|----------------|--------------|--------------|----------------|
| KB-4 | 1/2" | 8 3/4" | 4 1/8" | 18 3/4" |

C NUT SPINNER

| Stock Number | Shank Diameter | Head Width | Overall Length |
|--------------|----------------|------------|----------------|
| NB-15 | 5/8" | 1" | 15" |

EXTENSION BARS

| Stock Number | Shank Diameter | Overall Length |
|--------------|----------------|----------------|
| D SB-3 | 3/8" | 3 1/2" |
| E SB-5 | 3/8" | 5" |
| F SB-10 | 3/8" | 10" |

G UNIVERSAL JOINT

| Stock Number | Outside Diameter | Overall Length |
|--------------|------------------|----------------|
| SB-8 | 1 3/4" | 2 1/4" |

HEXAGON POWER SHANKS

A 1/4" SQUARE DRIVE

Fit Black and Decker and Van Dorn 1A nut drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| GM-3042 | 1/4" | 1" | 11/32" | 2" |
| GM-3043 | 1/4" | 1" | 15/32" | 3" |
| GM-3046 | 1/4" | 1" | 11/32" | 6" |

A 9/32" SQUARE DRIVE

Fit Black and Decker, Van Dorn 1A and Chicago Pneumatic nut drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| A-3042 | 9/32" | 1" | 13/32" | 2" |
| A-3043 | 9/32" | 1" | 15/32" | 4" |

A 3/8" SQUARE DRIVE

Fit Black and Decker and Chicago Pneumatic nut drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| A-3001 | 3/8" | 1 1/4" | 1/4" | 2 3/4" |
| A-3002 | 3/8" | 1 1/4" | 1/4" | 5" |
| A-3003 | 3/8" | 1 1/4" | 1/4" | 8" |
| A-3017 | 3/8" | 1 1/4" | 1/4" | 1 1/8" |

A 1/2" SQUARE DRIVE

Units with 5/16" hex end fit Independent Pneumatic drivers and units with 5/8" hex fit Black and Decker and Chicago Pneumatic drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| A-3011 | 1/2" | 1 1/4" | 1/4" | 2 3/4" |
| A-3012 | 1/2" | 1 1/4" | 1/4" | 5" |
| A-3013 | 1/2" | 1 1/4" | 1/4" | 8" |
| A-3014 | 1/2" | 1 1/4" | 1/4" | 12" |
| A-3015 | 1/2" | 1 1/4" | 1/4" | 18" |
| A-3018 | 1/2" | 1 1/4" | 1/4" | 1 1/8" |
| A-3021 | 5/8" | 2 1/4" | 3/8" | 2 3/4" |
| A-3022 | 5/8" | 1 3/4" | 3/8" | 5" |
| A-3023 | 5/8" | 1 3/4" | 3/8" | 8" |
| A-3024 | 5/8" | 1 3/4" | 3/8" | 12" |
| A-3025 | 5/8" | 1 3/4" | 3/8" | 18" |

A 5/8" SQUARE DRIVE

Fit Independent Pneumatic nut drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| A-3031 | 5/8" | 1 3/4" | 3/8" | 3" |
| A-3032 | 5/8" | 1 3/4" | 3/8" | 5" |

A 3/4" SQUARE DRIVE

Fit Independent Pneumatic nut drivers.

| Stock Number | Hex End A | Length of Hex B | Recess from End C | Overall Length D |
|--------------|-----------|-----------------|-------------------|------------------|
| A-3091 | 3/4" | 1 3/4" | 3/8" | 5" |

B 1/2" SQUARE DRIVE

Fits Ingersoll-Rand nut drivers.

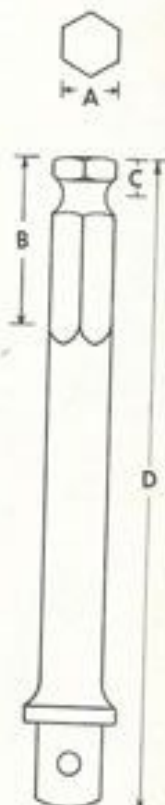
| Stock Number | Hex End A | Length of Hex B | Overall Length C |
|--------------|-----------|-----------------|------------------|
| A-3026 | 1/2" | 1 1/4" | 2 3/8" |

Snap-on Tools

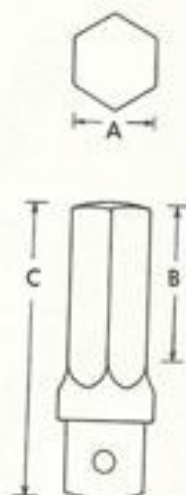
FOR PRODUCTION
AND MAINTENANCE



A



B



MISCELLANEOUS POWER SHANKS

A MORSE TAPER SHANK

| Stock Number | Square Drive | Morse Taper No. | Straight Shank Length A | Overall Length B |
|--------------|-----------------|-----------------|-------------------------|------------------|
| 163 | $\frac{3}{8}$ " | 1 | $3\frac{1}{4}$ " | 6" |
| 165 | $\frac{1}{2}$ " | 1 | $3\frac{1}{4}$ " | 6" |

B THOR ELECTRIC MOTOR SHANK

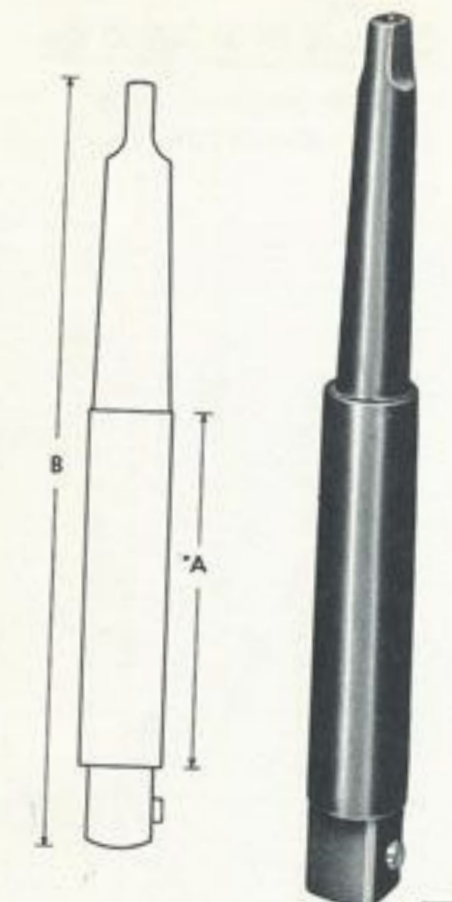
| Stock Number | Square Drive | Square Shank | Shank Length A | Overall Length B |
|--------------|-----------------|------------------|------------------|------------------|
| A-1035 | $\frac{3}{8}$ " | $\frac{5}{16}$ " | $1\frac{1}{4}$ " | $1\frac{3}{4}$ " |

C YANKEE SCREW DRIVER ADAPTORS

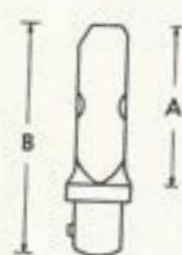
| Stock Number | Square Drive | Shank Diameter A | Overall Length B | Used on Model No. |
|--------------|------------------|------------------|------------------|-------------------|
| GM-1043 | $\frac{1}{4}$ " | $\frac{7}{32}$ " | $2\frac{1}{4}$ " | 130A |
| GM-1045 | $\frac{1}{4}$ " | $\frac{5}{16}$ " | $2\frac{1}{4}$ " | 31A, 20-3 |
| A-1043 | $\frac{5}{32}$ " | $\frac{7}{32}$ " | $2\frac{1}{4}$ " | 30A, 20-2 |
| A-1045 | $\frac{5}{32}$ " | $\frac{5}{16}$ " | $2\frac{1}{4}$ " | 31A, 20-3 |
| A-1032 | $\frac{3}{8}$ " | $\frac{7}{32}$ " | $2\frac{1}{4}$ " | 30A, 20-2 |
| A-1033 | $\frac{3}{8}$ " | $\frac{5}{16}$ " | $2\frac{1}{4}$ " | 31A, 20-3 |

D SOCKET ADAPTORS

| Stock Number | Square Drive | Hexagon Size A | Hexagon Length B | Overall Length C |
|--------------|-----------------|-----------------|------------------|------------------|
| A-3081 | $\frac{3}{8}$ " | $\frac{3}{8}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |
| A-3071 | $\frac{1}{2}$ " | $\frac{3}{8}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |
| A-3072 | $\frac{1}{2}$ " | $\frac{1}{2}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |
| A-3073 | $\frac{1}{2}$ " | $\frac{3}{4}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |
| A-3074 | $\frac{1}{2}$ " | $\frac{5}{8}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |
| A-3075 | $\frac{1}{2}$ " | $\frac{3}{4}$ " | $\frac{5}{8}$ " | $1\frac{1}{4}$ " |



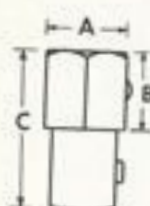
A



B



C



D

POWER SHANKS FOR PHILLIPS SCREWS

A 1/4"—24 SCREW SHANK DRIVE

| Stock Number | Phillips Bit No. | For Use On All These Drivers | Body Diameter A | Overall Length B |
|--------------|------------------|------------------------------|-----------------|------------------|
| A-401 | 1 | ARO | 3/16" | 1 1/2" |
| A-402 | 2 | CHICAGO PNEUMATIC | 3/16" | 1 1/2" |
| A-403 | 3 | THOR | 3/16" | 1 1/2" |

B STANDARD 1/4" HEXAGON DRIVE

| Stock Number | Phillips Bit No. | For Use On All These Drivers | Body Diameter A | Overall Length B |
|--------------|------------------|---|-----------------|------------------|
| A-491 | 1 | ARO BLACK & DECKER BUCKEYE TOOLS CHICAGO PNEUMATIC | 3/16" | 1 15/16" |
| A-492 | 2 | CLECO INGERSOLL-RAND KELLER MALL ROTOR TOOL | 3/16" | 1 15/16" |
| A-492A | 2 | SKILTOOL STANLEY THOR VAN DORN | 3/16" | 2 3/4" |

C 1/4" HEXAGON (DYNO-MITE) DRIVE

| Stock Number | Phillips Bit No. | For Use On All These Drivers | Body Diameter A | Overall Length B |
|--------------|------------------|------------------------------|-----------------|------------------|
| A-541C | 1 | MILLERS FALLS | 3/16" | 6" |
| A-542C | 2 | | 3/16" | 6" |

D YANKEE TYPE DRIVE

| Stock Number | Phillips Bit No. | For Use On All These Drivers | Body Diameter A | Drive End B | Overall Length C |
|--------------|------------------|------------------------------|-----------------|-------------|------------------|
| A-451 | 1 | YANKEE | 3/16" | 7/16" | 3 1/4" |
| A-452 | 2 | MILLERS FALLS | 3/16" | 7/16" | 3 1/4" |
| A-453 | 3 | GREENLEE | 3/16" | 7/16" | 3 1/4" |
| A-461 | 1 | | 3/16" | 3/4" | 3 1/4" |
| A-462 | 2 | | 3/16" | 3/4" | 3 1/4" |
| A-471 | 1 | | 3/16" | 7/8" | 3 1/4" |
| A-472 | 2 | | 3/16" | 7/8" | 3 1/4" |



A



B



C

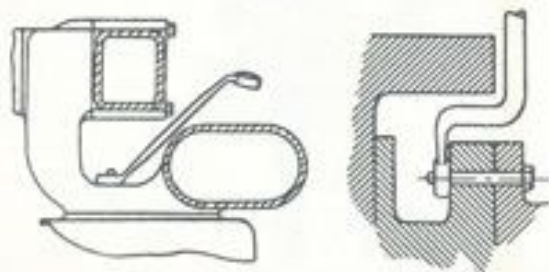


D



Snap-on Tools

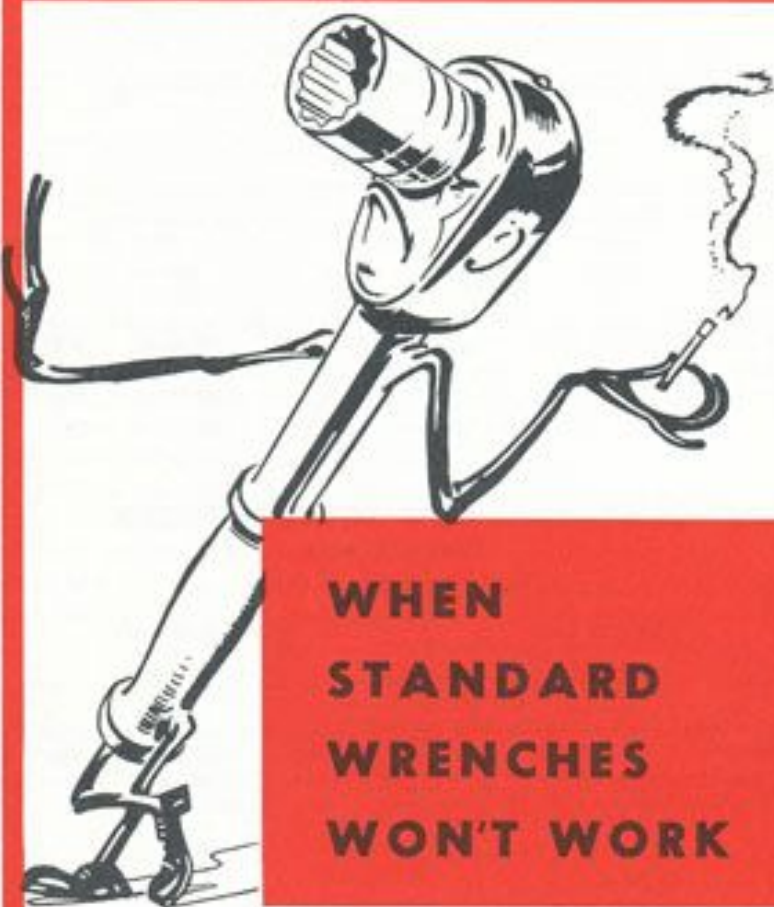
SERVING INDUSTRY
EVERYWHERE



SPECIAL WRENCHES

Built to Fit Specific Needs

SPEED OPERATIONS



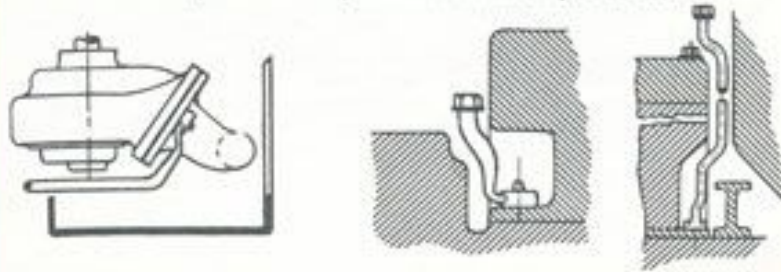
**WHEN
STANDARD
WRENCHES
WON'T WORK**

When the flow of products from automatic machines must pass through hand assembly production miracles cease and speed rests upon the individual skill of assembly line mechanics . . . and the *fitness for the job* of every tool they use.

SNAP-ON's industrial tool service can help eliminate "bottlenecks" in hand assembly operations through the careful selection of standard industrial wrenches and the development of special tools to handle the few jobs where standard wrenches won't work efficiently. "Specials" help speed the work and cut production costs.

Here are a few examples of SNAP-ON "Specials"; some were built to customers' specifications, others were developed by SNAP-ON tool designers after careful study of particular problems.

For many years, Production and Service Engineers of leading manufacturers throughout industry have relied on SNAP-ON for their special tool requirements. We offer you the same dependable service when "special" wrenches are needed in sufficient quantities to permit economical production.



SCREW DRIVER ATTACHMENTS

POWER TYPES

AND IMPACT TYPE

A STANDARD TIP SCREW DRIVERS (Power Type) 3/8" Square Drive

For use with PIT-12 (page 109) and "hand-type" wrench handles

| COMPLETE TOOL | | | REPLACEMENT PARTS | | |
|---------------|--------------|------------------|-------------------|----------|---------------|
| Stock No. | Tip Size | Overall Length A | Socket Only | Bit Only | Roll Pin Only |
| PF-23 | .031" x 3/4" | 1 13/16" | PF-23-1 | PF-23-2 | F-67A12 |
| PF-25 | .048" x 3/4" | 1 13/16" | PF-25-1 | PF-25-2 | F-67A12 |
| PF-31 | .060" x 3/4" | 1 7/8" | PF-31-1 | PF-31-2 | F-67A12 |

A STANDARD TIP SCREW DRIVERS (Power Type) 1/2" Square Drive

| COMPLETE TOOL | | | REPLACEMENT PARTS | | |
|---------------|--------------|------------------|-------------------|-----------|----------------|
| Stock No. | Tip Size | Overall Length A | Socket Only | Bit Only | Set Screw Only |
| PSW-284 | .050" x 3/4" | 3" | PSW-284-1 | PSW-284-2 | SA-12-3 |
| PSW-325 | .075" x 1/2" | 3" | PSW-325-1 | PSW-325-2 | SA-12-3 |

B PHILLIPS TIP SCREW DRIVERS (Power Type) 1/2" Square Drive

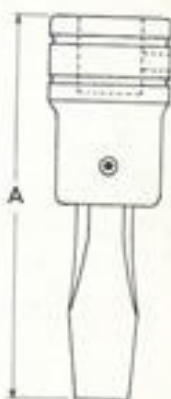
| COMPLETE TOOL | | | REPLACEMENT PARTS | | |
|---------------|-------------------|------------------|-------------------|----------|----------------|
| Stock No. | Phillips Bit Size | Overall Length A | Socket Only | Bit Only | Set Screw Only |
| PSP-32 | 3 | 2 1/8" | PSP-32-1 | PSP-32-2 | SA-12-3 |
| PSP-42 | 4 | 2 1/8" | PSP-42-1 | PSP-42-2 | SA-12-3 |

C HEX HEAD SCREW DRIVERS (Impact Type) 3/4" Square Drive

| COMPLETE TOOL | | | REPLACEMENT PARTS | | |
|---------------|-----------|------------------|-------------------|-----------|----------------|
| Wrench Size | Stock No. | Overall Length A | Socket Only | Bit Only | Set Screw Only |
| 5/8" | LAW-118 | 3 1/2" | LAW-118-1 | SA-18-2 | LAW-118-2A |
| 3/4" | LAW-120 | 3 3/4" | LAW-120-1 | LAW-120-2 | LAW-118-2A |
| 3/4" | LAW-124 | 4 3/8" | LAW-124-1 | LAW-124-2 | LAW-118-2A |

Snap-on Tools

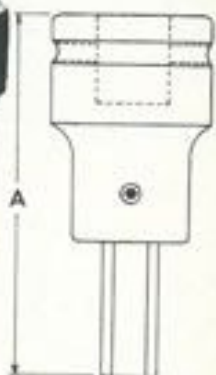
FOR PRODUCTION
AND MAINTENANCE



A



B



C

Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



INDUSTRIAL WRENCHES

HEX HEAD, BRISTOL AND "BOXOCKETS"

A STANDARD HEX HEAD WRENCHES

| Wrench Size A | Stock No. | Length To Bend B | Wrench Size A | Stock No. | Length To Bend B |
|------------------|-----------|------------------|------------------|-----------|------------------|
| $\frac{3}{16}$ " | AW-1 1/2 | 1 3/4" | $\frac{1}{4}$ " | AW-8 | 3 1/4" |
| $\frac{1}{8}$ " | AW-2 | 1 3/4" | $\frac{5}{16}$ " | AW-10 | 3 3/4" |
| $\frac{3}{16}$ " | AW-2 1/2 | 1 7/8" | $\frac{3}{8}$ " | AW-12 | 4 1/4" |
| $\frac{1}{2}$ " | AW-3 | 2" | $\frac{1}{2}$ " | AW-16 | 5 1/4" |
| $\frac{5}{16}$ " | AW-4 | 2 1/4" | $\frac{5}{8}$ " | AW-18 | 5 3/4" |
| $\frac{3}{8}$ " | AW-5 | 2 1/2" | $\frac{3}{4}$ " | AW-20 | 6 1/4" |
| $\frac{7}{16}$ " | AW-6 | 2 3/4" | $\frac{7}{8}$ " | AW-24 | 7 1/4" |
| $\frac{1}{2}$ " | AW-7 | 3" | | | |

AW-1007-K Set. Contains one each of the following sizes: $\frac{3}{16}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ " and $\frac{1}{4}$ ", in a transparent envelope-type plastic kit bag.

AW-1007 Set. Above set without the kit bag.

AW-1011-KB Set. Contains one each of sizes $\frac{3}{16}$ " through $\frac{3}{8}$ ", in a transparent envelope-type plastic kit bag.

AW-1011 Set. Above set without the kit bag.

AW-1015-K Set. One each of all fifteen wrenches listed above, in C-153B kit bag.

AW-1015 Set. Above set without the kit bag.

B LONG HEX HEAD WRENCHES

| Wrench Size A | Stock No. | Length To Bend B | Wrench Size A | Stock No. | Length To Bend B |
|------------------|-----------|------------------|------------------|-----------|------------------|
| $\frac{3}{16}$ " | AWL-3 | 3 3/8" | $\frac{5}{16}$ " | AWL-7 | 4 7/8" |
| $\frac{1}{8}$ " | AWL-4 | 3 3/4" | $\frac{1}{4}$ " | AWL-8 | 5 1/4" |
| $\frac{3}{16}$ " | AWL-5 | 4 1/8" | $\frac{5}{8}$ " | AWL-10 | 6" |
| $\frac{1}{2}$ " | AWL-6 | 4 1/2" | $\frac{3}{4}$ " | AWL-12 | 6 3/4" |

AWL-1008-K Set. Contains one each of all above wrenches, AWL-3 through AWL-12, in the C-33B kit bag.

AWL-1008 Set. Above set without the kit bag.

C BRISTOL SPLINE WRENCHES

| Stock No. | No. of Flutes | Outside Diameter A | Stock No. | No. of Flutes | Outside Diameter A |
|-----------|---------------|--------------------|-----------|---------------|--------------------|
| MS-4 | 6 | .048" | MS-20 | 6 | .183" |
| MS-5 | 4 | .069" | MS-24 | 6 | .216" |
| MS-6 | 4 | .076" | MS-28 | 6 | .251" |
| MS-8 | 6 | .094" | MS-32 | 6 | .291" |
| MS-10 | 6 | .110" | MS-40 | 6 | .372" |
| MS-16 | 6 | .144" | MS-48 | 6 | .454" |

MS-1012-K Set. Contains one each of all above wrenches, MS-4 through MS-48, in the C-112B kit bag.

MS-1012 Set. Above set without the kit bag.

D HALF MOON "BOXOCKETS"

| DOUBLE HEX | | Handle Radius | Head Depth A | Head Diameter B | Overall Length |
|------------------------------------|-----------|---------------|------------------------------------|-------------------------------------|----------------|
| Wrench Size | Stock No. | | | | |
| $\frac{3}{16}$ " & $\frac{1}{2}$ " | CX-1416 | 2 1/4" | $\frac{3}{16}$ " & $\frac{1}{4}$ " | $\frac{7}{16}$ " & $\frac{3}{4}$ " | 5 1/4" |
| $\frac{5}{16}$ " & $\frac{3}{8}$ " | CX-1820 | 2 3/8" | $\frac{1}{2}$ " & $\frac{5}{8}$ " | $\frac{5}{8}$ " & $\frac{3}{4}$ " | 6 1/2" |
| $\frac{3}{8}$ " & $\frac{3}{4}$ " | CX-2024 | 3 1/8" | $\frac{1}{2}$ " & $\frac{3}{4}$ " | $\frac{3}{4}$ " & $1 \frac{1}{4}$ " | 7 3/4" |

CX-603 Set. Contains one each of the three half moon BOXOCKETS listed above.

INDUSTRIAL HANDLES

RATCHETING "BOXOCKETS"

A SINGLE HEX—SOLID TYPE

Available on special order only

| Wrench Size | Stock Number | Head Depth A | Head Width B | Overall Length |
|-------------|--------------|--------------|--------------|----------------|
| 1/4" | 7122 | 3/4" | 1 1/2" | 9 1/4" |
| 3/4" | 7124 | 3/4" | 1 1/2" | 9 1/4" |

B SINGLE HEX—DETACHABLE HANDLE TYPE

Available on special order only

| COMPLETE TOOL | | | HEAD ONLY | | | HANDLE ONLY | |
|---------------|--------------|----------------|--------------|------------|------------|--------------|-----------------|
| Wrench Size | Stock Number | Overall Length | Stock Number | Head Depth | Head Width | Stock Number | Handle Diameter |
| 1/4" | L-7226 | 24" | L-7226-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 3/4" | L-7228 | 24" | L-7228-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 1 1/4" | L-7230 | 24" | L-7230-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 1 1/2" | L-7231 | 24" | L-7231-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 1 3/4" | L-7232 | 24" | L-7232-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 1 1/2" | L-7234 | 24" | L-7234-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |
| 1 3/4" | L-7236 | 24" | L-7236-Y | 1 1/4" | 2 1/4" | L-72H | 1 1/4" |

C D HEXAGON DOUBLE END OPEN FACE TYPE

| Wrench Size | Stock Number | Head Depth A | Head Width B | Overall Length |
|-------------|--------------|--------------|--------------|----------------|
|-------------|--------------|--------------|--------------|----------------|

SINGLE HEXAGON SIZES

| | | | | |
|-------------|-------|------|-------------|--------|
| 1/4" & 3/8" | C 73R | 3/4" | 3/4" & 5/8" | 4 1/4" |
| 3/4" & 1" | C 74 | 3/4" | 3/4" & 5/8" | 5 1/4" |

DOUBLE HEXAGON SIZES

| | | | | |
|-------------|------|--------|-----------------|--------|
| 1/4" & 3/8" | D 75 | 1 1/2" | 1 1/4" & 1" | 6 1/2" |
| 3/8" & 1/2" | D 76 | 1 1/2" | 1 1/4" & 1 1/4" | 7 1/4" |
| 1/2" & 3/4" | D 77 | 1 1/2" | 1 1/4" & 1 1/4" | 7 1/4" |
| 3/4" & 1" | D 79 | 1 1/2" | 1 1/4" & 1 1/4" | 8 1/2" |

E SINGLE HEX—OPEN FACE TYPE

| Wrench Size | Stock Number | Head Depth A | Head Width B | Overall Length |
|-------------|--------------|--------------|--------------|----------------|
| 3/8" | R-712 | 1 1/2" | 1 1/4" | 6 1/2" |
| 1/2" | R-714 | 1 1/2" | 1 1/4" | 6 1/2" |
| 3/4" | R-714B | 1 1/2" | 1 1/4" | 6 1/2" |
| 1" | R-716 | 1 1/2" | 1 1/4" | 6 1/2" |
| 1 1/4" | R-716B | 1 1/2" | 1 1/4" | 6 1/2" |
| 1 1/2" | R-720 | 1 1/2" | 1 1/4" | 8" |

F SINGLE HEX—HEAVY DUTY OPEN FACE TYPE

Available on special order only

| Wrench Size | Stock Number | Head Depth A | Head Width B | Overall Length |
|-------------|--------------|--------------|--------------|----------------|
| 3/4" | 9718 | 1 1/2" | 1 1/4" | 9" |
| 1 1/4" | 9722 | 1 1/2" | 1 1/4" | 9" |

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



Snap-on Tools

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EVERYWHERE



FLARE NUT & FLEX-HEAD WRENCHES, NUT DRIVERS

A SINGLE END FLARE NUT WRENCHES

Chrome Plated Finish

| DOUBLE HEX | | Head Depth A | Head Diameter B | Overall Length |
|-------------|-----------|-----------------|--------------------|----------------|
| Wrench Size | Stock No. | | | |
| 3/8" | RX-12 | 5/32" | 3/4" | 6 3/8" |
| 7/16" | RX-14 | 5/16" | 7/8" | 6 7/8" |
| 1/2" | RX-16 | 3/8" | 1 1/8" | 6 3/4" |
| 9/16" | RX-18 | 7/16" | 1 1/4" | 6 3/4" |
| 5/8" | RX-20 | 1/2" | 1 1/2" | 7 1/8" |
| 11/16" | RX-22 | 9/16" | 1 3/4" | 7 1/2" |
| 3/4" | RX-24 | 5/8" | 1 7/8" | 7 3/8" |
| 7/8" | RX-26 | 11/16" | 2" | 7 3/4" |
| 15/16" | RX-28 | 3/4" | 2 1/8" | 7 3/4" |
| 1" | RX-30 | 7/8" | 2 1/4" | 7 3/4" |
| 1 1/16" | RX-32 | 15/16" | 2 3/8" | 7 13/16" |
| 1 1/8" | RX-34 | 1 1/16" | 2 1/2" | 7 3/4" |
| 1 1/4" | RX-36 | 1 1/8" | 2 3/4" | 7 3/4" |
| 1 1/2" | RX-38 | 1 1/4" | 3" | 7 15/16" |
| 1 3/4" | RX-40 | 1 3/8" | 3 1/8" | 8" |
| 1 7/8" | RX-42 | 1 7/16" | 3 1/4" | 10" |
| 2" | RX-44 | 1 1/2" | 3 1/2" | 10" |
| 2 1/8" | RX-46 | 1 5/8" | 3 3/4" | 10 1/8" |
| 2 1/4" | RX-48 | 1 3/4" | 4" | 10 1/2" |
| 2 3/8" | RX-52 | 1 7/8" | 4 1/8" | 12 3/4" |

B and C DOUBLE END FLARE NUT WRENCHES

Chrome Plated Finish

| Wrench Sizes | Stock No. | Head Depth A | Head Diameter B | Overall Length |
|----------------------|-------------|-----------------|--------------------|----------------|
| SINGLE HEXAGON SIZES | | | | |
| 3/8" & 7/16" | B RXV-10125 | 5/32" & 1/16" | 7/8" & 1 1/8" | 5 3/4" |
| 7/16" & 1/2" | B RXV-12145 | 1/16" & 3/8" | 1 1/4" & 1 1/2" | 6 1/4" |
| 1/2" & 9/16" | B RXV-12155 | 1/16" & 7/16" | 1 1/2" & 1 3/4" | 6 1/4" |
| 9/16" & 5/8" | B RXV-16185 | 3/8" & 1/2" | 1 3/4" & 2" | 7 1/2" |
| DOUBLE HEXAGON SIZES | | | | |
| 3/8" & 3/4" | C RXV-2024 | 3/8" & 1/2" | 1 1/4" & 1 3/4" | 8 3/8" |
| 3/4" & 1" | C RXV-2832 | 1/2" & 3/4" | 1 3/4" & 2 1/4" | 10" |

D FLEX-HEAD WRENCHES

Chrome Plated Finish

| Wrench Sizes | Stock No. | Head Diameter | Overall Length |
|----------------------|-----------|-----------------|----------------|
| SINGLE HEXAGON SIZES | | | |
| 3/8" & 7/16" | FH-1214AS | 7/8" & 1 1/8" | 6 3/8" |
| DOUBLE HEXAGON SIZES | | | |
| 7/16" & 1/2" | FH-1416 | 1 1/4" & 1 1/2" | 6 3/8" |
| 1/2" & 9/16" | FH-1618 | 1 1/2" & 1 3/4" | 7 1/8" |
| 9/16" & 5/8" | FH-1820A | 1 3/4" & 2" | 8 1/4" |
| 5/8" & 3/4" | FH-2024A | 2" & 2 1/4" | 9 1/8" |
| 3/4" & 7/8" | FH-2226 | 2 1/4" & 2 3/4" | 10 1/4" |
| 7/8" & 1" | FH-2428 | 2 3/4" & 3" | 10 3/8" |

FH-607 Set, Seven Flex-Head Wrenches FH-1214AS through FH-2428.

E SINGLE HEX NUT DRIVERS

Hollow shafts provide bolt clearance

| Wrench Size | Stock No. | Shank Length | Overall Length |
|-------------|-----------|--------------|----------------|
| 3/8" | ND-6 | 3 1/4" | 7" |
| 7/16" | ND-8 | 3 3/8" | 7" |
| 1/2" | ND-10 | 3 1/2" | 7" |
| 9/16" | ND-11 | 3 3/4" | 6 7/8" |
| 5/8" | ND-12 | 3 7/8" | 7 1/4" |
| 3/4" | ND-14 | 4" | 7 1/2" |
| 7/8" | ND-16 | 4 1/8" | 7 3/4" |
| 1" | ND-18 | 4 1/4" | 7 3/4" |

ND-80 Nut Driver Set. Contains one each of above Nut Drivers ND-6 through ND-18.

ND-60 Nut Driver Set. Contains one each of six Nut Drivers ND-10 through ND-18.

"BOXOCKET" WRENCHES

A MIDGET SINGLE HEX OFFSET SERIES

Chrome Plated Finish

| SINGLE HEX | | Head Depth A | Head Diameters B | Overall Length |
|-------------------------------------|--------------|-------------------------------------|-------------------------------------|-------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{16}$ " & $\frac{1}{8}$ " | XI-1213 | $\frac{3}{16}$ " & $\frac{1}{8}$ " | $\frac{1}{8}$ " & $\frac{3}{16}$ " | 2 $\frac{1}{2}$ " |
| $\frac{7}{32}$ " & $\frac{1}{16}$ " | XI-1415 | $\frac{3}{16}$ " & $\frac{1}{16}$ " | $\frac{1}{16}$ " & $\frac{3}{16}$ " | 3 $\frac{1}{2}$ " |
| $\frac{1}{4}$ " & $\frac{1}{8}$ " | XI-1618 | $\frac{1}{8}$ " & $\frac{1}{16}$ " | $\frac{1}{8}$ " & $\frac{3}{16}$ " | 3 $\frac{3}{4}$ " |
| $\frac{5}{16}$ " & $\frac{1}{16}$ " | XI-2022 | $\frac{1}{8}$ " & $\frac{1}{16}$ " | $\frac{1}{16}$ " & $\frac{3}{16}$ " | 3 $\frac{3}{4}$ " |

XI-604-Set. Contains one each of the four Midget BOXOCKETS listed above XI-1213 thru XI-2022 in the C-41B kit bag.

XI-604 Set. Above Set without the kit bag.

B DWARF SINGLE HEX OFFSET SERIES

Chrome Plated Finish

| SINGLE HEX | | Head Depth A | Head Diameters B | Overall Length |
|------------------------------------|--------------|------------------------------------|-----------------------------------|-------------------|
| Wrench Size | Stock No. | | | |
| $\frac{1}{4}$ " & $\frac{3}{8}$ " | XS-8105 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{8}$ " & $\frac{3}{4}$ " | 4 $\frac{1}{2}$ " |
| $\frac{5}{16}$ " & $\frac{3}{8}$ " | XS-10125 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | 4 $\frac{1}{2}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | XS-12145 | $\frac{1}{4}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 4 $\frac{3}{4}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | XS-14165 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | 5 $\frac{1}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | XS-16185 | $\frac{1}{4}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 5 $\frac{1}{2}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | XS-18205 | $\frac{1}{2}$ " & $\frac{3}{4}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 5 $\frac{3}{4}$ " |

XS-6065-K Set. Contains one each of the six BOXOCKETS listed above, XS-8105 through XS-18205 in the C-40B kit bag.

XS-6065 Set. Above set without the kit bag.

XS-6035A-K Set. Contains the XS-10125, XS-14165 and XS-18205 in the C-33B kit bag.

XS-6035A Set. Above Set without the kit bag.

C DWARF DOUBLE HEX OFFSET SERIES

Chrome Plated Finish

| DOUBLE HEXAGON | | Head Depth A | Head Diameters B | Overall Length |
|------------------------------------|--------------|------------------------------------|------------------------------------|-------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{16}$ " & $\frac{3}{8}$ " | XS-1012 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 4 $\frac{1}{2}$ " |
| $\frac{3}{16}$ " & $\frac{3}{8}$ " | XS-1214 | $\frac{1}{4}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 4 $\frac{1}{4}$ " |
| $\frac{3}{16}$ " & $\frac{1}{2}$ " | XS-1416 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | 5 $\frac{1}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | XS-1618 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 5 $\frac{1}{2}$ " |
| $\frac{3}{16}$ " & $\frac{3}{8}$ " | XS-1820 | $\frac{1}{2}$ " & $\frac{3}{4}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 5 $\frac{3}{4}$ " |
| $\frac{3}{16}$ " & $\frac{3}{8}$ " | XS-2024 | $\frac{3}{8}$ " & $\frac{1}{2}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 6 $\frac{3}{4}$ " |
| $\frac{1}{4}$ " & $\frac{1}{2}$ " | XS-2226 | $\frac{3}{16}$ " & $\frac{1}{2}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 6 $\frac{1}{2}$ " |

XS-607-K Set. Contains one each of all of the double hex BOXOCKETS listed above, in the C-74B kit bag.

XS-607 Set. Above set without the kit bag.

XS-603-K Set. Contains the XS-1214, XS-1618 and XS-2024 double hex BOXOCKETS, in the C-33B kit bag.

XS-603 Set. Above set without the kit bag.

Snap-on Tools

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15° "BOXOCKET" WRENCHES

A 15° ANGLE SERIES

Chrome Plated Finish

| DOUBLE HEX | | Head Depth A | Head Diameter B | Overall Length |
|--|----------------|-------------------------------------|--------------------------------------|--------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{8}$ " & $\frac{3}{16}$ " | XD-1214 | $\frac{3}{16}$ " & $\frac{1}{32}$ " | $\frac{13}{32}$ " & $\frac{1}{16}$ " | 8 $\frac{1}{2}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | XD-1416 | $\frac{1}{32}$ " & $\frac{1}{32}$ " | $\frac{1}{16}$ " & $\frac{3}{4}$ " | 8 $\frac{3}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{16}$ " | XD-1618 | $\frac{1}{32}$ " & $\frac{3}{16}$ " | $\frac{3}{4}$ " & $\frac{21}{32}$ " | 9 $\frac{1}{4}$ " |
| $\frac{5}{16}$ " & $\frac{5}{16}$ " | XD-1820 | $\frac{3}{8}$ " & $\frac{3}{16}$ " | $\frac{21}{32}$ " & $\frac{3}{16}$ " | 9 $\frac{3}{8}$ " |
| $\frac{11}{32}$ " & $\frac{1}{4}$ " | XD-1922 | $\frac{3}{8}$ " & $\frac{3}{16}$ " | $\frac{21}{32}$ " & $\frac{1}{32}$ " | 10" |
| $\frac{5}{8}$ " & $\frac{1}{4}$ " | XD-2022 | $\frac{3}{8}$ " & $\frac{3}{16}$ " | $\frac{1}{16}$ " & $\frac{1}{32}$ " | 10 $\frac{3}{8}$ " |
| $\frac{5}{8}$ " & $\frac{3}{4}$ " | XD-2024 | $\frac{3}{4}$ " & $\frac{1}{32}$ " | $\frac{1}{16}$ " & $\frac{1}{32}$ " | 10 $\frac{3}{8}$ " |
| $\frac{25}{32}$ " & $\frac{1}{16}$ " | XD-2526 | $\frac{1}{2}$ " & $\frac{1}{2}$ " | $\frac{1}{32}$ " & $\frac{1}{16}$ " | 11 $\frac{3}{8}$ " |
| $\frac{3}{4}$ " & $\frac{3}{16}$ " | XD-2428 | $\frac{1}{32}$ " & $\frac{3}{16}$ " | $\frac{1}{32}$ " & $\frac{1}{32}$ " | 12 $\frac{3}{8}$ " |
| $\frac{13}{16}$ " & $\frac{3}{16}$ " | XD-2628 | $\frac{1}{2}$ " & $\frac{1}{2}$ " | $\frac{1}{16}$ " & $\frac{1}{32}$ " | 12 $\frac{3}{8}$ " |
| $\frac{7}{8}$ " & $\frac{1}{16}$ " | XD-2830 | $\frac{3}{16}$ " & $\frac{3}{16}$ " | $\frac{1}{32}$ " & $\frac{1}{16}$ " | 12 $\frac{3}{8}$ " |
| $\frac{15}{16}$ " & 1" | XD-3032 | $\frac{3}{8}$ " & $\frac{3}{8}$ " | $\frac{1}{16}$ " & $\frac{1}{16}$ " | 13 $\frac{3}{8}$ " |
| 1 $\frac{1}{16}$ " & 1 $\frac{1}{8}$ " | XD-3436 | $\frac{1}{4}$ " & $\frac{1}{4}$ " | $\frac{1}{32}$ " & $\frac{1}{16}$ " | 15 $\frac{1}{2}$ " |
| 1 $\frac{1}{8}$ " & 1 $\frac{1}{4}$ " | XD-3440 | $\frac{1}{4}$ " & $\frac{1}{4}$ " | $\frac{1}{32}$ " & $\frac{1}{32}$ " | 16 $\frac{1}{4}$ " |
| 1 $\frac{1}{4}$ " & 1 $\frac{1}{2}$ " | XD-3640 | $\frac{1}{4}$ " & $\frac{1}{4}$ " | $\frac{1}{16}$ " & $\frac{1}{32}$ " | 17" |

XD-615-K Set. Fifteen wrenches—one each of the BOXOCKETS listed above in C-1508 kit bag.

XD-615 Set. Above set without the kit bag.

XD-610-K Set. Ten wrenches—XD-1214, XD-1416, XD-1618, XD-1820, XD-1922, XD-2024, XD-2526, XD-2428, XD-3032, XD-3436 in C-1138 kit bag.

XD-610 Set. Above set without the kit bag.

XD-606-K Set. Six wrenches—XD-1214, XD-1618, XD-1922, XD-2024, XD-2628 and XD-3032, in C-638 kit bag.

XD-606 Set. Above set without the kit bag.

DOUBLE OFFSET "BOXOCKET" WRENCHES

A DOUBLE HEXAGON OFFSET SERIES

Chrome Plated Finish

| DOUBLE HEXAGON | | Head Depth A | Head Diameters B | Overall Length |
|---------------------------------------|-----------|-------------------|---|--------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{8}$ " & $\frac{3}{8}$ " | XV-1214 | $\frac{13}{32}$ " | $\frac{3}{8}$ " & $\frac{3}{8}$ " | $7\frac{15}{32}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | XV-1416 | $\frac{1}{8}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | $8\frac{3}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{8}$ " | XV-1618 | $\frac{11}{32}$ " | $\frac{3}{4}$ " & $\frac{13}{16}$ " | $8\frac{25}{32}$ " |
| $\frac{3}{8}$ " & $\frac{3}{8}$ " | XV-1820 | $\frac{3}{8}$ " | $\frac{13}{16}$ " & $\frac{21}{32}$ " | $9\frac{3}{8}$ " |
| $\frac{13}{32}$ " & $\frac{13}{32}$ " | XV-1922 | $\frac{13}{32}$ " | $\frac{3}{8}$ " & 1 " | $9\frac{11}{16}$ " |
| $\frac{3}{8}$ " & $\frac{13}{16}$ " | XV-2022 | $\frac{11}{32}$ " | $\frac{25}{32}$ " & 1 " | $9\frac{13}{16}$ " |
| $\frac{3}{8}$ " & $\frac{3}{8}$ " | XV-2024 | $\frac{3}{8}$ " | $\frac{25}{32}$ " & $1\frac{1}{32}$ " | 10 " |
| $\frac{11}{16}$ " & $\frac{11}{16}$ " | XV-2226 | $\frac{1}{2}$ " | 1 " & $1\frac{1}{32}$ " | $10\frac{1}{2}$ " |
| $\frac{3}{4}$ " & $\frac{3}{8}$ " | XV-2428 | $\frac{1}{2}$ " | $1\frac{1}{2}$ " & $1\frac{1}{4}$ " | 11 " |
| $\frac{25}{32}$ " & $\frac{13}{16}$ " | XV-2526 | $\frac{1}{2}$ " | $1\frac{1}{8}$ " & $1\frac{1}{2}$ " | 11 " |
| $\frac{3}{8}$ " & $\frac{13}{16}$ " | XV-2830 | $\frac{13}{32}$ " | $1\frac{1}{4}$ " & $1\frac{13}{32}$ " | 13 " |
| $\frac{13}{16}$ " & 1 " | XV-3032 | $\frac{3}{8}$ " | $1\frac{13}{16}$ " & $1\frac{3}{4}$ " | 14 " |
| 1 " & $1\frac{1}{4}$ " | XV-3236 | $\frac{25}{32}$ " | $1\frac{3}{4}$ " & $1\frac{5}{8}$ " | 15 " |
| $1\frac{1}{8}$ " & $1\frac{1}{8}$ " | XV-3436 | $\frac{25}{32}$ " | $1\frac{1}{2}$ " & $1\frac{3}{8}$ " | 15 " |
| $1\frac{1}{4}$ " & $1\frac{1}{4}$ " | XV-3440 | $\frac{11}{16}$ " | $1\frac{1}{2}$ " & $1\frac{25}{32}$ " | 16 " |
| $1\frac{1}{8}$ " & $1\frac{3}{8}$ " | XV-3842 | $\frac{11}{16}$ " | $1\frac{13}{16}$ " & $1\frac{3}{4}$ " | 17 " |
| $1\frac{1}{4}$ " & $1\frac{3}{8}$ " | XV-4044 | $\frac{25}{32}$ " | $1\frac{25}{32}$ " & $1\frac{25}{32}$ " | 18 " |
| $1\frac{3}{8}$ " & $1\frac{1}{2}$ " | XV-4448 | $\frac{13}{16}$ " | $1\frac{25}{32}$ " & $2\frac{1}{32}$ " | 19 " |
| $1\frac{3}{8}$ " & $1\frac{3}{8}$ " | XV-4652 | $\frac{3}{4}$ " | $2\frac{1}{16}$ " & $2\frac{1}{16}$ " | 21 " |

XV-618-K Set. Eighteen wrenches—one each of all the BOXOCKETS listed above except the XV-3436, in the C-1818 kit bag.

XV-618 Set. Above set without the kit bag.

XV-611-K Set. Eleven wrenches—XV-1214, XV-1416, XV-1618, XV-1820, XV-1922, XV-2024, XV-2526, XV-2428, XV-3032, XV-3236 and XV-3440, in the C-1138 kit bag.

XV-611 Set. Above set without the kit bag.

XV-608-K Set. Eight wrenches—XV-1214, XV-1618, XV-1922, XV-2024, XV-2526, XV-2830, XV-3236 and XV-3440, in the C-838 kit bag.

XV-608 Set. Above set without the kit bag.

B SINGLE HEXAGON OFFSET SERIES

Chrome Plated Finish

| SINGLE HEXAGON | | Head Depth A | Head Diameters B | Overall Length |
|-----------------------------------|-----------|-------------------|---------------------------------------|--------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{8}$ " & $\frac{3}{8}$ " | XV-12145 | $\frac{13}{32}$ " | $\frac{3}{8}$ " & $\frac{3}{8}$ " | $7\frac{15}{32}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | XV-14165 | $\frac{1}{8}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | $8\frac{3}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{8}$ " | XV-16185 | $\frac{11}{32}$ " | $\frac{3}{4}$ " & $\frac{13}{16}$ " | $8\frac{25}{32}$ " |
| $\frac{3}{8}$ " & $\frac{3}{8}$ " | XV-18205 | $\frac{3}{8}$ " | $\frac{13}{16}$ " & $\frac{21}{32}$ " | $9\frac{3}{8}$ " |

XVS-604 Set. Contains one each of the four BOXOCKETS XV-12145 through XV-18205 listed above.

Snap-on Tools

FOR PRODUCTION
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DOUBLE OFFSET "BOXOCKET" WRENCHES

These wrenches are identical in every way to the chrome plated wrenches shown on opposite page with the exception of the finish. The lower cost of black finish permits us to pass substantial savings on to you. If the appearance and rust resistant qualities of chrome plating are of less importance to you than cost, here is one place you can cut cost without a single doubt about quality.

A DOUBLE HEXAGON OFFSET SERIES

Black Finish

| DOUBLE HEXAGON | | Head Depth A | Head Diameter B | Overall Length |
|---------------------------------------|--------------|--------------------|---------------------------------------|--------------------|
| Wrench Size | Stock No. | | | |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | GXY-1214 | $\frac{3}{16}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 7 $\frac{1}{4}$ " |
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | GXY-1416 | $\frac{3}{16}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 8 $\frac{3}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | GXY-1618 | $\frac{7}{32}$ " | $\frac{3}{4}$ " & $\frac{13}{16}$ " | 8 $\frac{3}{4}$ " |
| $\frac{3}{4}$ " & $\frac{1}{2}$ " | GXY-1820 | $\frac{3}{8}$ " | $\frac{13}{16}$ " & $\frac{21}{32}$ " | 9 $\frac{3}{4}$ " |
| $\frac{13}{16}$ " & $\frac{1}{2}$ " | GXY-1922 | $\frac{13}{32}$ " | $\frac{3}{4}$ " & 1" | 9 $\frac{1}{2}$ " |
| $\frac{1}{2}$ " & $\frac{13}{16}$ " | GXY-2022 | $\frac{13}{32}$ " | $\frac{21}{32}$ " & 1" | 9 $\frac{1}{2}$ " |
| $\frac{3}{4}$ " & $\frac{3}{4}$ " | GXY-2024 | $\frac{3}{8}$ " | $\frac{21}{32}$ " & $\frac{13}{16}$ " | 10" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-2226 | $\frac{3}{4}$ " | 1" & $\frac{13}{16}$ " | 10 $\frac{1}{2}$ " |
| $\frac{3}{4}$ " & $\frac{3}{4}$ " | GXY-2428 | $\frac{3}{4}$ " | $\frac{13}{16}$ " & $\frac{1}{4}$ " | 11" |
| $\frac{21}{32}$ " & $\frac{13}{16}$ " | GXY-2526 | $\frac{3}{4}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 11" |
| $\frac{3}{4}$ " & $\frac{13}{16}$ " | GXY-2830 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 13" |
| $\frac{13}{16}$ " & 1" | GXY-3032 | $\frac{3}{4}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 14" |
| 1" & $\frac{13}{16}$ " | GXY-3236 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 15" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-3436 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 15" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-3440 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 16" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-3842 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 17" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-4044 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 18" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-4448 | $\frac{13}{16}$ " | $\frac{13}{16}$ " & $\frac{13}{16}$ " | 19" |
| $\frac{13}{16}$ " & $\frac{13}{16}$ " | GXY-4652 | $\frac{3}{8}$ " | $\frac{21}{32}$ " & $\frac{21}{32}$ " | 21" |

GXY-618-K Set. Eighteen wrenches—one each of the BOXOCKETS listed above except the GXY-3436, in the C-1818 kit bag.

GXY-618 Set. Above set without the kit bag.

GXY-611-K Set. Eleven wrenches—GXY-1214, GXY-1416, GXY-1618, GXY-1820, GXY-1922, GXY-2024, GXY-2526, GXY-2428, GXY-3032, GXY-3236 and GXY-3440, in the C-1138 kit bag.

GXY-611 Set. Above set without the kit bag.

GXY-408-K Set. Eight wrenches—GXY-1214, GXY-1618, GXY-1922, GXY-2024, GXY-2526, GXY-2830, GXY-3236 and GXY-3440, in the C-838 kit bag.

GXY-608 Set. Above set without the kit bag.

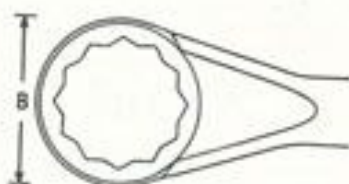
STRIKING "BOXOCKET" WRENCHES

Snap-on Tools

FOR PRODUCTION
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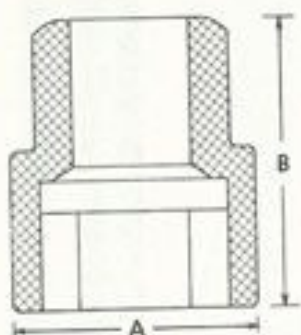
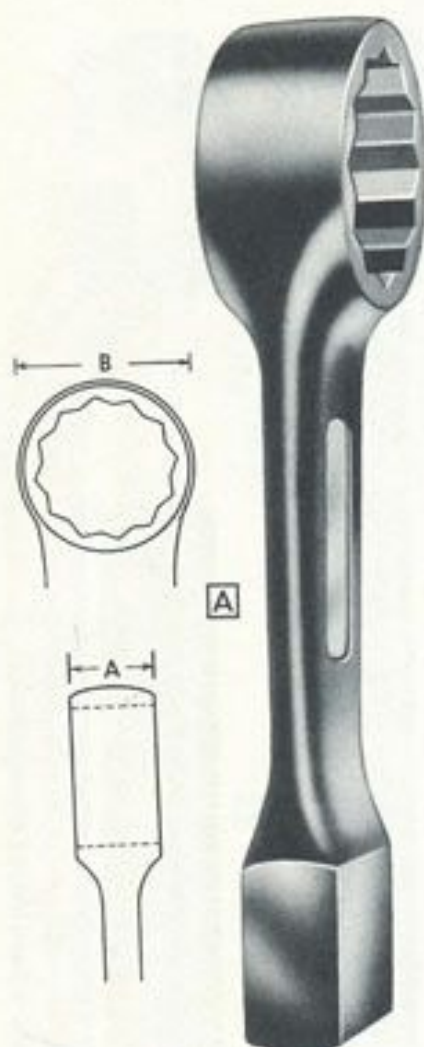
STRIKING "BOXOCKETS" Cadmium Finish

| DOUBLE HEXAGON | | Head Depth A | Head Diameter B | Overall Length |
|----------------|--------------|--------------------|-----------------------|-------------------|
| Wrench Size | Stock No. | | | |
| 1 1/4" | HX-340 | 3/8" | 1 1/4" | 10 1/2" |
| 1 1/4" | HX-360 | 13/16" | 1 3/4" | 10 1/2" |
| 1 1/4" | HX-400 | 3/4" | 1 5/8" | 11" |
| 1 3/8" | HX-420 | 13/16" | 2" | 11" |
| 1 3/8" | HX-440 | 3/4" | 2 1/8" | 11" |
| 1 3/8" | HX-460 | 3/4" | 2 3/8" | 11 1/2" |
| 1 1/2" | HX-480 | 3/4" | 2 1/4" | 11 1/2" |
| 1 5/8" | HX-520 | 1" | 2 3/4" | 12" |
| 1 5/8" | HX-540 | 1 1/16" | 2 1/2" | 12" |
| 1 3/4" | HX-560 | 1 1/8" | 2 3/4" | 12" |
| 1 3/4" | HX-580 | 1 1/4" | 2 5/8" | 12 1/2" |
| 1 3/4" | HX-600 | 1 1/4" | 2 3/4" | 12 5/8" |
| 2" | HX-640 | 1 1/4" | 2 5/8" | 13" |
| 2 1/8" | HX-700 | 1 3/4" | 3 1/4" | 13 1/2" |
| 2 1/4" | HX-720 | 1 3/4" | 3 1/2" | 13 1/2" |
| 2 3/8" | HX-760 | 1 3/4" | 3 5/8" | 14" |
| 2 3/8" | HX-820 | 1 1/2" | 3 3/4" | 14 1/2" |
| 2 3/8" | HX-840 | 1 1/2" | 3 3/4" | 14 1/2" |
| 2 3/4" | HX-880 | 1 5/8" | 4" | 14 3/4" |
| 2 3/4" | HX-940 | 1 5/8" | 4 1/8" | 16" |
| 3 1/4" | HX-1000 | 1 3/4" | 4 1/4" | 16 1/2" |



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



SLEDGE "BOXOCKETS" AND SOCKETS

A SLEDGE TYPE "BOXOCKETS"

| DOUBLE HEXAGON | | Head Depth A | Head Diameter B | Overall Length |
|----------------|--------------|--------------------|-----------------------|-------------------|
| Wrench Size | Stock No. | | | |
| 1 1/2" | DX-148 | 1" | 2 1/4" | 7 3/4" |
| 1 5/8" | DX-152 | 1 1/8" | 2 3/8" | 7 5/8" |
| 1 3/4" | DX-154 | 1 1/4" | 2 1/2" | 7 3/4" |
| 1 7/8" | DX-158 | 1 3/8" | 2 5/8" | 7 7/8" |
| 1 3/4" | DX-160 | 1 3/4" | 2 3/4" | 8 3/4" |
| 2" | DX-164 | 1 3/4" | 2 5/8" | 11 1/2" |
| 2 1/8" | DX-166 | 1 3/8" | 3" | 11 1/2" |
| 2 3/8" | DX-170 | 1 3/2" | 3 3/8" | 11 1/2" |
| 2 1/4" | DX-172 | 1 1/2" | 3 1/4" | 11 5/8" |
| 2 3/8" | DX-176 | 1 5/8" | 3 3/4" | 11 7/8" |
| 2 3/8" | DX-178 | 1 5/8" | 3 1/2" | 11 3/4" |
| 2 3/8" | DX-182 | 1 3/4" | 3 13/16" | 12 3/8" |
| 2 3/8" | DX-184 | 1 3/4" | 3 13/16" | 12 3/8" |
| 2 3/4" | DX-188 | 1 3/8" | 4 1/4" | 14 1/2" |
| 2 3/8" | DX-190 | 1 3/8" | 4 1/4" | 14 1/2" |
| 2 3/8" | DX-194 | 2" | 4 1/8" | 14 1/2" |
| 3" | DX-196 | 2" | 4 3/8" | 14 1/2" |
| 3 3/8" | DX-1100 | 2 1/4" | 4 1/2" | 17 1/2" |
| 3 3/8" | DX-1108 | 2 1/4" | 4 3/8" | 17 1/2" |
| 3 1/2" | DX-1112 | 2 3/8" | 5 1/4" | 17 1/2" |
| 3 3/4" | DX-1120 | 2 3/8" | 5 3/8" | 17 1/2" |
| 3 3/8" | DX-1124 | 2 3/8" | 5 1/2" | 17 3/4" |
| 4 1/8" | DX-1132 | 2 3/8" | 5 3/8" | 17 3/4" |
| 4 1/4" | DX-1136 | 2 3/8" | 6" | 18" |
| 4 1/2" | DX-1144 | 3 1/4" | 6 1/2" | 19 3/4" |
| 4 3/8" | DX-1148 | 3 1/8" | 6 1/4" | 19 3/4" |

B SOCKETS FOR ABOVE "BOXOCKETS"

| SINGLE HEXAGON | | Male End Hex Drive Size | Outside Diameter A | Overall Length B |
|----------------|--------------|-------------------------------|--------------------------|------------------------|
| Wrench Size | Stock No. | | | |
| 1 5/8" | H-520 | 1 1/8" | 2 3/4" | 3 3/4" |
| 1 3/4" | H-520S | 2" | 2 3/8" | 3 3/4" |
| 1 3/8" | H-580 | 1 1/4" | 2 13/16" | 3 1/2" |
| 1 3/8" | H-580S | 2" | 2 13/16" | 3 1/2" |
| 2" | H-640 | 2" | 3" | 3 3/4" |
| 2 1/8" | H-700 | 2 1/8" | 3 1/4" | 3 3/8" |
| 2 3/8" | H-700S | 2" | 3 1/4" | 3 3/8" |
| 2 3/8" | H-760 | 2 3/4" | 3 1/2" | 4 1/8" |
| 2 3/8" | H-760S | 2" | 3 1/2" | 4 1/8" |
| 2 3/8" | H-820 | 2 3/8" | 3 3/4" | 4 1/4" |
| 2 3/8" | H-820S | 2" | 3 3/4" | 4 1/4" |
| 2 3/4" | H-880 | 2 3/4" | 4 1/8" | 4 1/2" |
| 2 3/4" | H-880S | 2" | 4 1/8" | 4 1/2" |
| 2 3/8" | H-940 | 2 13/16" | 4 1/4" | 4 3/8" |
| 2 3/8" | H-940S | 2" | 4 1/4" | 4 3/8" |
| 3 1/8" | H-1000 | 3 1/2" | 4 3/8" | 5" |
| 3 1/8" | H-1000S | 2" | 4 3/8" | 5" |
| 3 1/2" | H-1120 | 3 1/2" | 5" | 5 3/4" |
| 3 1/2" | H-1120S | 2 3/4" | 5" | 5 3/4" |
| 3 3/8" | H-1240 | 3 3/8" | 5 3/8" | 6" |
| 3 3/8" | H-1240S | 2 3/4" | 5 3/8" | 6" |
| 4 1/4" | H-1360 | 4 1/4" | 6" | 6 1/2" |
| 4 1/4" | H-1360S | 2 3/8" | 6" | 6" |
| 4 3/8" | H-1480 | 4 3/8" | 6 1/2" | 7 1/2" |

FOR POWER AND HAND ASSEMBLY OPERATIONS

HEAVY DUTY "BOXOCKETS"

STRAIGHT AND OFFSET TYPES

USED WITH TUBULAR HANDLES

A STRAIGHT SERIES

| DOUBLE HEXAGON | | Head Depth A | Head Diameter B | Length | | For Handle No. |
|----------------|-----------|-----------------|--------------------|-----------|-------------|----------------|
| Wrench Size | Stock No. | | | Head Only | With Handle | |
| 9/16" | 130 | 3/4" | 1 1/2" | 7 3/4" | 19 1/2" | 15 |
| 1" | 132 | 3/4" | 1 3/8" | 7 3/4" | 19 1/2" | 15 |
| 1 1/4" | 134 | 3/4" | 1 3/4" | 7 3/4" | 22 3/4" | 18 |
| 1 1/2" | 136 | 3/4" | 1 3/4" | 7 3/4" | 22 3/4" | 18 |
| 1 3/4" | 140 | 3/4" | 1 3/4" | 7 3/4" | 22 3/4" | 18 |
| 1 3/4" | 142 | 3/4" | 2" | 13" | 30 3/4" | 24 |
| 1 3/4" | 144 | 3/4" | 2 3/8" | 13 3/4" | 30 3/4" | 24 |
| 1 3/4" | 146 | 3/4" | 2 3/8" | 13 3/4" | 30 3/4" | 24 |
| 1 3/4" | 148 | 3/4" | 2 3/4" | 13 3/4" | 30 3/4" | 24 |
| 1 3/4" | 150 | 1" | 2 11/16" | 13 3/4" | 31" | 24 |
| 1 3/4" | 152 | 1" | 2 3/4" | 13 3/4" | 31" | 24 |
| 1 3/4" | 154 | 1 1/4" | 2 3/4" | 13 3/4" | 37" | 30 |
| 1 3/4" | 156 | 1 1/4" | 2 3/4" | 13 3/4" | 37" | 30 |
| 1 3/4" | 158 | 1 1/4" | 2 3/4" | 13 3/4" | 37 1/4" | 30 |
| 1 3/4" | 160 | 1 1/4" | 2 3/4" | 13 3/4" | 37 1/4" | 30 |
| 2" | 164 | 1 1/4" | 2 3/4" | 13 3/4" | 37 1/4" | 30 |
| 2 3/8" | 170 | 1 3/4" | 3 3/4" | 13 3/4" | 43 3/4" | 36 |
| 2 3/4" | 172 | 1 3/4" | 3 3/4" | 13 3/4" | 43 3/4" | 36 |
| 2 3/4" | 176 | 1 3/4" | 3 3/4" | 13 3/4" | 43 3/4" | 36 |
| 2 3/4" | 182 | 1 3/4" | 3 3/4" | 13 3/4" | 43 3/4" | 36 |
| 2 3/4" | 188 | 1 3/4" | 3 3/4" | 13 3/4" | 44" | 36 |
| 2 3/4" | 194 | 1 3/4" | 4 3/4" | 14 3/4" | 44 1/4" | 36 |
| 3 1/4" | 1100 | 1 3/4" | 4 3/4" | 14 3/4" | 44 1/4" | 36 |

B OFFSET SERIES

| DOUBLE HEXAGON | | Head Depth | Head Diameter | Height of Offset | Length | | For Handle No. |
|----------------|-----------|------------|---------------|------------------|-----------|-------------|----------------|
| Wrench Size | Stock No. | | | | Head Only | With Handle | |
| 1 1/4" | X-340 | 3/4" | 1 1/4" | 1 1/4" | 7 3/4" | 22 3/4" | 18 |
| 1 1/4" | X-360 | 3/4" | 1 3/4" | 1" | 7 3/4" | 22 3/4" | 18 |
| 1 1/4" | X-400 | 3/4" | 1 3/4" | 1 1/4" | 7 3/4" | 22 3/4" | 18 |
| 1 1/4" | X-420 | 3/4" | 2" | 1 1/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-440 | 3/4" | 2 3/8" | 1 1/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-460 | 3/4" | 2 3/8" | 1 1/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-480 | 3/4" | 2 3/4" | 1 1/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-500 | 3/4" | 2 11/16" | 1 1/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-520 | 1" | 2 3/4" | 1 3/4" | 10 1/4" | 30 3/4" | 24 |
| 1 1/4" | X-540 | 1 1/4" | 2 3/4" | 1 3/4" | 13 1/4" | 37" | 30 |
| 1 1/4" | X-560 | 1 1/4" | 2 3/4" | 1 3/4" | 13 1/4" | 37" | 30 |
| 1 1/4" | X-580 | 1 1/4" | 2 3/4" | 1 3/4" | 13 1/4" | 37 1/4" | 30 |
| 1 1/4" | X-600 | 1 1/4" | 2 3/4" | 1 3/4" | 13 1/4" | 37 1/4" | 30 |
| 2" | X-640 | 1 1/4" | 2 3/4" | 1 3/4" | 13 1/4" | 37 1/4" | 30 |
| 2 3/8" | X-700 | 1 3/4" | 3 3/4" | 1 3/4" | 13 1/4" | 37 1/4" | 30 |
| 2 3/4" | X-720 | 1 3/4" | 3 3/4" | 1 3/4" | 13 1/4" | 37 1/4" | 30 |
| 2 3/4" | X-760 | 1 3/4" | 3 3/4" | 2" | 13 1/4" | 43 1/4" | 36 |
| 2 3/4" | X-820 | 1 3/4" | 3 3/4" | 2 1/4" | 13 1/4" | 43 1/4" | 36 |
| 2 3/4" | X-840 | 1 3/4" | 3 3/4" | 2 1/4" | 13 1/4" | 43 1/4" | 36 |
| 2 3/4" | X-880 | 1 3/4" | 3 3/4" | 2 1/4" | 13 1/4" | 43 1/4" | 36 |
| 2 3/4" | X-940 | 1 3/4" | 4 3/4" | 2 3/4" | 14 3/4" | 44 1/4" | 36 |
| 3 1/4" | X-1000 | 1 3/4" | 4 3/4" | 2 3/4" | 14 3/4" | 44 1/4" | 36 |

Tubular handles and sets of these units are listed on the facing page.

Snap-on Tools

FOR PRODUCTION
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HEAVY DUTY OPEN ENDS USED WITH TUBULAR HANDLES OPEN END SPUD WRENCHES

A HEAVY DUTY OPEN END WRENCHES

| Wrench Size | Stock No. | Head Depth A | Head Diameter B | Length | | Fits Handle |
|-------------|-----------|--------------|-----------------|-----------|-------------|-------------|
| | | | | Head Only | With Handle | |
| 3/8" | OE-128 | 3/8" | 1 1/4" | 10 1/4" | 21 3/4" | 15 |
| 1/2" | OE-130 | 1/2" | 1 3/4" | 10 1/4" | 21 3/4" | 15 |
| 1" | OE-132 | 3/4" | 2 1/4" | 10 1/4" | 25 1/4" | 18 |
| 1 1/4" | OE-134 | 3/4" | 2 3/4" | 10 1/4" | 25 1/4" | 18 |
| 1 3/8" | OE-136 | 3/4" | 2 3/4" | 10 1/4" | 25 1/4" | 18 |
| 1 1/2" | OE-140 | 3/4" | 2 3/4" | 11 3/8" | 26 3/8" | 18 |
| 1 3/4" | OE-142 | 3/4" | 2 3/4" | 11 3/8" | 26 3/8" | 18 |
| 1 7/8" | OE-144 | 1 1/4" | 3 1/4" | 13 3/8" | 31 3/8" | 24 |
| 1 3/4" | OE-146 | 1 1/4" | 3 1/4" | 13 3/8" | 31 3/8" | 24 |
| 1 1/2" | OE-148 | 1 1/4" | 3 1/4" | 13 3/8" | 31 3/8" | 24 |

OE-810 Set. Contains one each of all of the H.D. Open End Wrenches OE-128 through OE-148 listed above.

OE-813H Set. Contains the OE-810 Set plus one each of the Nos. 15, 18 and 24 tubular handles.

C TUBULAR HANDLES

| Stock Number | Inside Diameter | Outside Diameter | Overall Length |
|--------------|-----------------|------------------|----------------|
| 15 | 3/8" | 1 1/4" | 15" |
| 18 | 1/2" | 1 3/4" | 18" |
| 24 | 3/4" | 2 1/4" | 24" |
| 30 | 1 1/4" | 3 1/4" | 30" |
| 36 | 1 3/4" | 3 3/4" | 36" |

B OPEN END SPUD WRENCHES

| Wrench Size | Stock No. | Head Depth A | Head Diameter B | Handle Diameter | Overall Length |
|-------------|-----------|--------------|-----------------|-----------------|----------------|
| 3/8" | SOE-128 | 3/8" | 1 1/4" | 3/8" | 14 1/4" |
| 1/2" | SOE-130 | 1/2" | 1 3/4" | 3/8" | 14 1/4" |
| 1" | SOE-132 | 3/4" | 2 1/4" | 1 1/4" | 16 1/4" |
| 1 1/4" | SOE-134 | 3/4" | 2 3/4" | 1 1/4" | 16 1/4" |
| 1 3/8" | SOE-136 | 3/4" | 2 3/4" | 1 1/4" | 16 1/4" |
| 1 1/2" | SOE-140 | 3/4" | 2 3/4" | 1 1/4" | 17 1/4" |
| 1 3/4" | SOE-142 | 3/4" | 2 3/4" | 1 1/4" | 17 1/4" |
| 1 7/8" | SOE-144 | 1 1/4" | 3 1/4" | 3/4" | 20" |
| 1 3/4" | SOE-146 | 1 1/4" | 3 1/4" | 3/4" | 20" |
| 1 1/2" | SOE-148 | 1 1/4" | 3 1/4" | 3/4" | 20" |

HEAVY DUTY "BOXOCKET" WRENCH SETS

XH-624 Set. Contains one each of the Straight H.D. BOXOCKETS Nos. 130 through 1100 listed on the opposite page.

XH-629H Set. Contains the XH-624 set plus the 5 tubular handles Nos. 15 through 36.

XH-617 Set. Contains one each of 17 Straight H.D. BOXOCKETS Nos. 130 through 170 listed on the opposite page.

XH-621H Set. Contains the XH-617 Set plus 4 tubular handles Nos. 15, 18, 24 and 30.

XO-622 Set. Contains one each of the Offset H.D. BOXOCKETS X-340 through X-1000 listed on the opposite page.

XO-626H Set. Contains the XO-622 set plus 4 tubular handles Nos. 18, 24, 30 and 36.

XO-616 Set. Contains one each of 16 Offset H.D. BOXOCKETS X-340 through X-720 listed on the opposite page.

XO-619H Set. Contains the XO-616 set plus one each of the Nos. 18, 24 and 30 tubular handles.

OPEN END WRENCHES

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

SNAP-ON's BLUE-POINT open end wrenches are unequalled for strength, toughness and durability. Thin heads with narrow tapered jaws and precisely machined openings operate in very close working quarters. Finest alloy steel and skilled heat treatment combine exceptional strength with light weight and balanced design. Chrome plating adds maximum rust proofing and fine appearance.

STANDARD OPEN ENDS

Chrome Plated Finish

| Wrench Sizes | Stock No. | Head Depth A | Head Diameters B | Overall Length |
|-----------------------------------|-----------|-----------------|-----------------------------------|-------------------|
| $\frac{1}{4}"$ & $\frac{3}{8}"$ | S-810 | $\frac{3}{32}"$ | $\frac{1}{16}"$ & $\frac{3}{16}"$ | 4" |
| $\frac{3}{8}"$ & $\frac{1}{2}"$ | S-1012 | $\frac{3}{16}"$ | $\frac{3}{16}"$ & $\frac{1}{2}"$ | 4 $\frac{1}{2}"$ |
| $\frac{1}{2}"$ & $\frac{3}{4}"$ | S-1214 | $\frac{1}{8}"$ | $\frac{1}{2}"$ & $\frac{3}{4}"$ | 5" |
| $\frac{3}{4}"$ & $1"$ | S-1416 | $\frac{1}{4}"$ | $\frac{3}{4}"$ & $1"$ | 5 $\frac{1}{2}"$ |
| $1"$ & $1\frac{1}{4}"$ | S-1618 | $\frac{1}{2}"$ | $1"$ & $1\frac{1}{4}"$ | 6" |
| $1\frac{1}{4}"$ & $1\frac{1}{2}"$ | S-1820 | $\frac{3}{4}"$ | $1\frac{1}{4}"$ & $1\frac{1}{2}"$ | 6 $\frac{1}{2}"$ |
| $1\frac{1}{2}"$ & $1\frac{3}{4}"$ | S-1822 | $\frac{7}{8}"$ | $1\frac{1}{2}"$ & $1\frac{3}{4}"$ | 6 $\frac{1}{2}"$ |
| $1\frac{3}{4}"$ & $2"$ | S-1922 | $1"$ | $1\frac{3}{4}"$ & $2"$ | 7" |
| $2"$ & $2\frac{1}{4}"$ | S-2022 | $1\frac{1}{8}"$ | $2"$ & $2\frac{1}{4}"$ | 7" |
| $2\frac{1}{4}"$ & $2\frac{1}{2}"$ | S-2024 | $1\frac{1}{4}"$ | $2\frac{1}{4}"$ & $2\frac{1}{2}"$ | 7 $\frac{1}{4}"$ |
| $2\frac{1}{2}"$ & $2\frac{3}{4}"$ | S-2224 | $1\frac{1}{2}"$ | $2\frac{1}{2}"$ & $2\frac{3}{4}"$ | 8 $\frac{1}{4}"$ |
| $2\frac{3}{4}"$ & $3"$ | S-2228 | $1\frac{3}{4}"$ | $2\frac{3}{4}"$ & $3"$ | 8 $\frac{3}{4}"$ |
| $3"$ & $3\frac{1}{4}"$ | S-2426 | $1\frac{7}{8}"$ | $3"$ & $3\frac{1}{4}"$ | 9 $\frac{1}{4}"$ |
| $3\frac{1}{4}"$ & $3\frac{1}{2}"$ | S-2428 | $2"$ | $3\frac{1}{4}"$ & $3\frac{1}{2}"$ | 9 $\frac{1}{4}"$ |
| $3\frac{1}{2}"$ & $3\frac{3}{4}"$ | S-2526 | $2\frac{1}{8}"$ | $3\frac{1}{2}"$ & $3\frac{3}{4}"$ | 10" |
| $3\frac{3}{4}"$ & $4"$ | S-2628 | $2\frac{1}{4}"$ | $3\frac{3}{4}"$ & $4"$ | 10" |
| $4"$ & $4\frac{1}{4}"$ | S-2830 | $2\frac{1}{2}"$ | $4"$ & $4\frac{1}{4}"$ | 10 $\frac{1}{2}"$ |
| $4\frac{1}{4}"$ & $4\frac{1}{2}"$ | S-2832 | $2\frac{3}{4}"$ | $4\frac{1}{4}"$ & $4\frac{1}{2}"$ | 11 $\frac{1}{8}"$ |
| $4\frac{1}{2}"$ & $4\frac{3}{4}"$ | S-2834 | $2\frac{7}{8}"$ | $4\frac{1}{2}"$ & $4\frac{3}{4}"$ | 11 $\frac{1}{8}"$ |
| $4\frac{3}{4}"$ & $5"$ | S-3032 | $3"$ | $4\frac{3}{4}"$ & $5"$ | 12 $\frac{1}{4}"$ |
| $5"$ & $5\frac{1}{4}"$ | S-3236 | $3\frac{1}{8}"$ | $5"$ & $5\frac{1}{4}"$ | 12 $\frac{1}{2}"$ |
| $5\frac{1}{4}"$ & $5\frac{1}{2}"$ | S-3436 | $3\frac{1}{4}"$ | $5\frac{1}{4}"$ & $5\frac{1}{2}"$ | 13 $\frac{1}{4}"$ |
| $5\frac{1}{2}"$ & $5\frac{3}{4}"$ | S-3440 | $3\frac{3}{8}"$ | $5\frac{1}{2}"$ & $5\frac{3}{4}"$ | 13 $\frac{1}{4}"$ |
| $5\frac{3}{4}"$ & $6"$ | S-3842 | $3\frac{1}{2}"$ | $5\frac{3}{4}"$ & $6"$ | 14" |
| $6"$ & $6\frac{1}{4}"$ | S-4044 | $3\frac{3}{4}"$ | $6"$ & $6\frac{1}{4}"$ | 15 $\frac{1}{4}"$ |
| $6\frac{1}{4}"$ & $6\frac{1}{2}"$ | S-4046 | $3\frac{7}{8}"$ | $6\frac{1}{4}"$ & $6\frac{1}{2}"$ | 15 $\frac{1}{4}"$ |
| $6\frac{1}{2}"$ & $6\frac{3}{4}"$ | S-4448 | $4"$ | $6\frac{1}{2}"$ & $6\frac{3}{4}"$ | 15 $\frac{3}{4}"$ |
| $6\frac{3}{4}"$ & $7"$ | S-4652 | $4\frac{1}{8}"$ | $6\frac{3}{4}"$ & $7"$ | 16 $\frac{1}{4}"$ |
| | | | $7"$ & $7\frac{1}{8}"$ | 17" |

OE-821-K Set. Twenty-one wrenches—one each of those listed above except S-1822, S-2228, S-2428, S-2830, S-2832, S-2834, and S-4046, complete in the C-2108 kit bag.

OE-821 Set. Above set without the kit bag.

OE-815-K Set. Fifteen wrenches—S-810, S-1012, S-1214, S-1416, S-1618, S-1820, S-1922, S-2024, S-2526, S-2428, S-2830, S-3032, S-3236, S-3436, and S-3440, in the C-1528 kit bag.

OE-815 Set. Above set without the kit bag.

OE-812-K Set. Twelve wrenches—S-810, S-1012, S-1214, S-1416, S-1618, S-1820, S-1922, S-2024, S-2526, S-2428, S-3032, and S-3436, in the C-1228 kit bag.

OE-812 Set. Above set without the kit bag.

OE-809-K Set. Nine wrenches—S-810, S-1214, S-1618, S-1922, S-2024, S-2526, S-2830, S-3236, and S-3440, in the C-918 kit bag.

OE-809 Set. Above set without the kit bag.

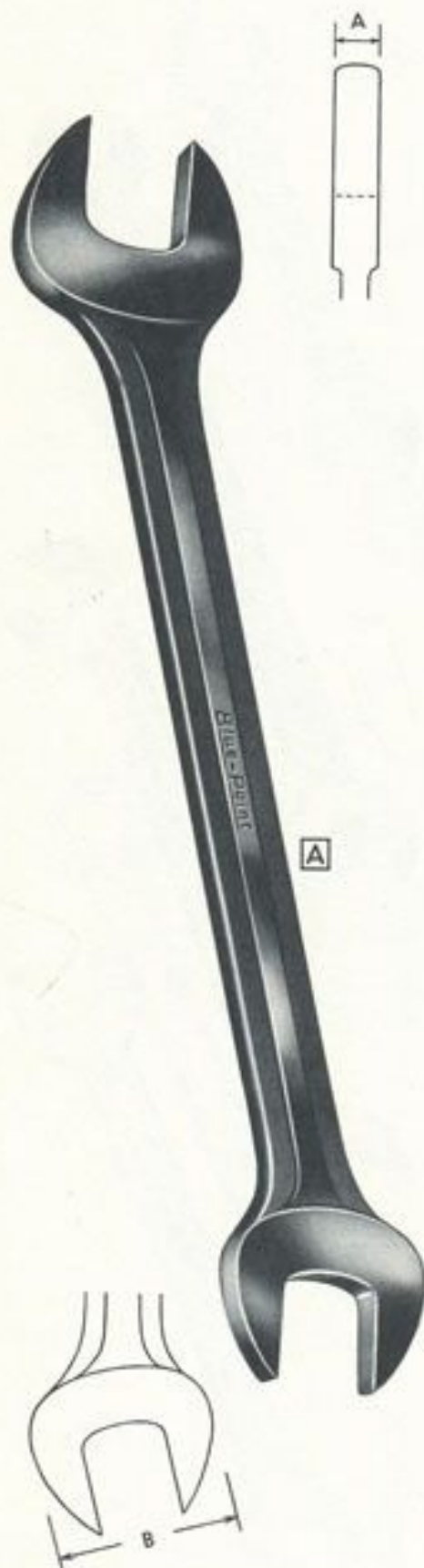
OE-806-K Set. Six wrenches—S-1214, S-1618, S-1922, S-2024, S-2526, and S-2830, in the C-628 kit bag.

OE-806 Set. Above set without the kit bag.



Snap-on Tools

SERVING INDUSTRY
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OPEN END WRENCHES

These wrenches are identical in every way to the chrome plated wrenches shown on opposite page with the exception of the finish. The lower cost of black finish permits us to pass substantial savings on to you. If the appearance and rust resistant qualities of chrome plating are of less importance to you than cost, here is one place you can cut cost without a single doubt about quality.

A STANDARD OPEN ENDS

Black Finish

| Wrench Sizes | Stock Number | Head Depth A | Head Diameters B | Overall Length |
|---------------------------------------|--------------|------------------|---------------------------------------|--------------------|
| $\frac{1}{4}$ " & $\frac{3}{16}$ " | S-810B | $\frac{3}{16}$ " | $\frac{1}{2}$ " & $\frac{5}{16}$ " | 4" |
| $\frac{5}{16}$ " & $\frac{3}{8}$ " | S-1012B | $\frac{3}{16}$ " | $\frac{7}{16}$ " & $\frac{9}{16}$ " | 4 $\frac{1}{2}$ " |
| $\frac{3}{8}$ " & $\frac{7}{16}$ " | S-1214B | $\frac{3}{16}$ " | $\frac{9}{16}$ " & $\frac{5}{8}$ " | 5" |
| $\frac{7}{16}$ " & $\frac{1}{2}$ " | S-1416B | $\frac{3}{16}$ " | $\frac{5}{8}$ " & $\frac{11}{16}$ " | 5 $\frac{1}{2}$ " |
| $\frac{1}{2}$ " & $\frac{9}{16}$ " | S-1618B | $\frac{3}{16}$ " | $\frac{11}{16}$ " & $\frac{13}{16}$ " | 6" |
| $\frac{9}{16}$ " & $\frac{5}{8}$ " | S-1820B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 6 $\frac{1}{2}$ " |
| $\frac{5}{8}$ " & $\frac{11}{16}$ " | S-1822B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 6 $\frac{1}{2}$ " |
| $\frac{11}{16}$ " & $\frac{13}{16}$ " | S-1922B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 7" |
| $\frac{5}{8}$ " & $\frac{13}{16}$ " | S-2022B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 7" |
| $\frac{3}{4}$ " & $\frac{7}{8}$ " | S-2024B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 7 $\frac{3}{4}$ " |
| $\frac{13}{16}$ " & $\frac{7}{8}$ " | S-2224B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 8 $\frac{3}{4}$ " |
| $\frac{13}{16}$ " & $\frac{7}{8}$ " | S-2228B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 9 $\frac{1}{4}$ " |
| $\frac{3}{4}$ " & $\frac{15}{16}$ " | S-2426B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 9 $\frac{1}{4}$ " |
| $\frac{7}{8}$ " & $\frac{15}{16}$ " | S-2428B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 10" |
| $\frac{7}{8}$ " & $\frac{15}{16}$ " | S-2526B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 9 $\frac{1}{4}$ " |
| $\frac{13}{16}$ " & $\frac{7}{8}$ " | S-2628B | $\frac{3}{16}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 10" |
| $\frac{3}{4}$ " & $\frac{15}{16}$ " | S-2830B | $\frac{1}{2}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 11 $\frac{1}{8}$ " |
| $\frac{7}{8}$ " & 1" | S-2832B | $\frac{1}{2}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 11 $\frac{1}{8}$ " |
| $\frac{7}{8}$ " & $\frac{15}{16}$ " | S-2834B | $\frac{1}{2}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 12 $\frac{3}{8}$ " |
| $\frac{15}{16}$ " & 1" | S-3032B | $\frac{1}{2}$ " | $\frac{13}{16}$ " & $\frac{15}{16}$ " | 12 $\frac{3}{8}$ " |
| 1" & $\frac{11}{16}$ " | S-3236B | $\frac{3}{8}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 12 $\frac{3}{8}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-3436B | $\frac{3}{8}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 13 $\frac{1}{4}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-3440B | $\frac{3}{8}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 14" |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-3842B | $\frac{1}{2}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 15 $\frac{1}{2}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-4044B | $\frac{1}{2}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 15 $\frac{1}{2}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-4046B | $\frac{1}{2}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 15 $\frac{1}{2}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-4448B | $\frac{1}{2}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 16 $\frac{1}{4}$ " |
| $\frac{13}{16}$ " & $\frac{15}{16}$ " | S-4652B | $\frac{3}{4}$ " | $\frac{21}{16}$ " & $\frac{23}{16}$ " | 17" |

OEB-821-K Set. Twenty-one wrenches. One each of those listed above except S-1822B, S-2228B, S-2426B, S-2628B, S-2832B, S-2834B and S-4046B, in C-210B kit bag.

OEB-821 Set. Above set without the kit bag.

OEB-815-K Set. Fifteen wrenches—S-810B, S-1012B, S-1214B, S-1416B, S-1618B, S-1820B, S-1922B, S-2024B, S-2428B, S-2526B, S-2830B, S-3032B, S-3236B, S-3436B, S-3440B, in C-150B kit bag.

OEB-815 Set. Above set without the kit bag.

OEB-812-K Set. Twelve wrenches—S-810B, S-1012B, S-1214B, S-1416B, S-1618B, S-1820B, S-1922B, S-2024B, S-2526B, S-2428B, S-3032B, S-3436B, in C-122B kit bag.

OEB-812 Set. Above set without the kit bag.

OEB-809-K Set. Nine wrenches—S-810B, S-1214B, S-1618B, S-1922B, S-2024B, S-2526B, S-2830B, S-3236B, S-3440B, in C-91B kit bag.

OEB-809 Set. Above set without the kit bag.

OEB-806-K Set. Six wrenches—S-1214B, S-1618B, S-1922B, S-2024B, S-2526B, S-2830B, in C-62B kit bag.

OEB-806 Set. Above set without the kit bag.

OPEN END WRENCHES

A SHORT SERIES

Chrome Plated Finish

| Wrench Sizes | Stock No. | Head Depth A | Head Diameters B | Overall Length |
|------------------------------------|-----------|------------------|------------------------------------|-------------------|
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | J-1214 | $\frac{3}{4}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | 2 $\frac{3}{4}$ " |
| $\frac{1}{4}$ " & $\frac{3}{8}$ " | J-1620 | $\frac{1}{2}$ " | $\frac{1}{4}$ " & $\frac{3}{8}$ " | 3 $\frac{1}{4}$ " |
| $\frac{3}{16}$ " & $\frac{1}{2}$ " | J-2022 | $\frac{3}{16}$ " | $\frac{3}{16}$ " & $\frac{1}{2}$ " | 3 $\frac{1}{2}$ " |
| $\frac{3}{8}$ " & $\frac{3}{4}$ " | J-2428 | $\frac{3}{8}$ " | $\frac{3}{8}$ " & $\frac{3}{4}$ " | 3 $\frac{3}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | J-3236 | $\frac{1}{2}$ " | $\frac{1}{2}$ " & 1" | 4 $\frac{1}{4}$ " |

J-805-K Set. Five wrenches—one each of the above, J-1214 through J-3236, in the C-528 kit bag.

J-805 Set. Above set without the kit bag.

B WEDGE-GRIP SERIES

Chrome Plated Finish

| Wrench Sizes | Stock No. | Head Depth A | Head Diameters B | Overall Length |
|-----------------------------------|-----------|-----------------------------------|-----------------------------------|---------------------|
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | S-1416W | $\frac{3}{8}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{1}{2}$ " | 5 $\frac{11}{16}$ " |
| $\frac{3}{8}$ " & $\frac{3}{4}$ " | S-1820W | $\frac{3}{8}$ " & $\frac{3}{4}$ " | $\frac{1}{2}$ " & $\frac{1}{2}$ " | 7 $\frac{1}{4}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | S-2428W | $\frac{1}{2}$ " & $\frac{1}{2}$ " | $\frac{1}{2}$ " & $\frac{1}{2}$ " | 9 $\frac{1}{8}$ " |

OE-W-803 Set. Three wrenches—one each of the above, S-1416W, S-1820W, S-2428W.

C ANGLE HEAD SERIES

Chrome Plated Finish

Heads of these wrenches are set at 30° and 60° to the wrench handle.

| Wrench Size | Stock No. | Head Depth A | Head Diameter B | Overall Length |
|-----------------|-----------|------------------|------------------|---------------------|
| $\frac{3}{8}$ " | V-5212 | $\frac{3}{8}$ " | $\frac{3}{8}$ " | 5" |
| $\frac{1}{4}$ " | V-5214 | $\frac{3}{16}$ " | $\frac{3}{16}$ " | 5 $\frac{1}{2}$ " |
| $\frac{1}{2}$ " | V-5216 | $\frac{3}{16}$ " | $\frac{1}{2}$ " | 6" |
| $\frac{3}{4}$ " | V-5218 | $\frac{1}{4}$ " | $\frac{3}{4}$ " | 6 $\frac{1}{2}$ " |
| $\frac{5}{8}$ " | V-5220 | $\frac{1}{4}$ " | $\frac{5}{8}$ " | 6 $\frac{11}{16}$ " |
| $\frac{1}{2}$ " | V-5222 | $\frac{3}{16}$ " | $\frac{1}{2}$ " | 7 $\frac{1}{2}$ " |
| $\frac{3}{4}$ " | V-5224 | $\frac{3}{8}$ " | $\frac{3}{4}$ " | 8" |

V-807-K Set. Seven wrenches—one each of the above, V-5212 through V-5224, in the C-748 kit bag.

V-807 Set. Above set of wrenches without the kit bag.

D RATCHETING SERIES

| Wrench Sizes | Stock No. | Head Depth A | Head Diameters B | Overall Length |
|-----------------------------------|-----------|-----------------|-----------------------------------|-------------------|
| $\frac{3}{8}$ " & $\frac{1}{2}$ " | RS-1214 | $\frac{3}{8}$ " | $\frac{3}{8}$ " & $\frac{1}{2}$ " | 5" |
| $\frac{3}{8}$ " & $\frac{3}{4}$ " | RS-1416 | $\frac{3}{8}$ " | $\frac{3}{8}$ " & $\frac{3}{4}$ " | 8 $\frac{1}{2}$ " |
| $\frac{1}{2}$ " & $\frac{3}{4}$ " | RS-1618 | $\frac{3}{8}$ " | $\frac{1}{2}$ " & $\frac{3}{4}$ " | 6" |
| $\frac{3}{4}$ " & $\frac{1}{2}$ " | RS-1820 | $\frac{1}{4}$ " | $\frac{3}{4}$ " & $\frac{1}{2}$ " | 6 $\frac{1}{2}$ " |

RS-804A Set. Four wrenches—one each of the above, RS-1214 through RS-1820.

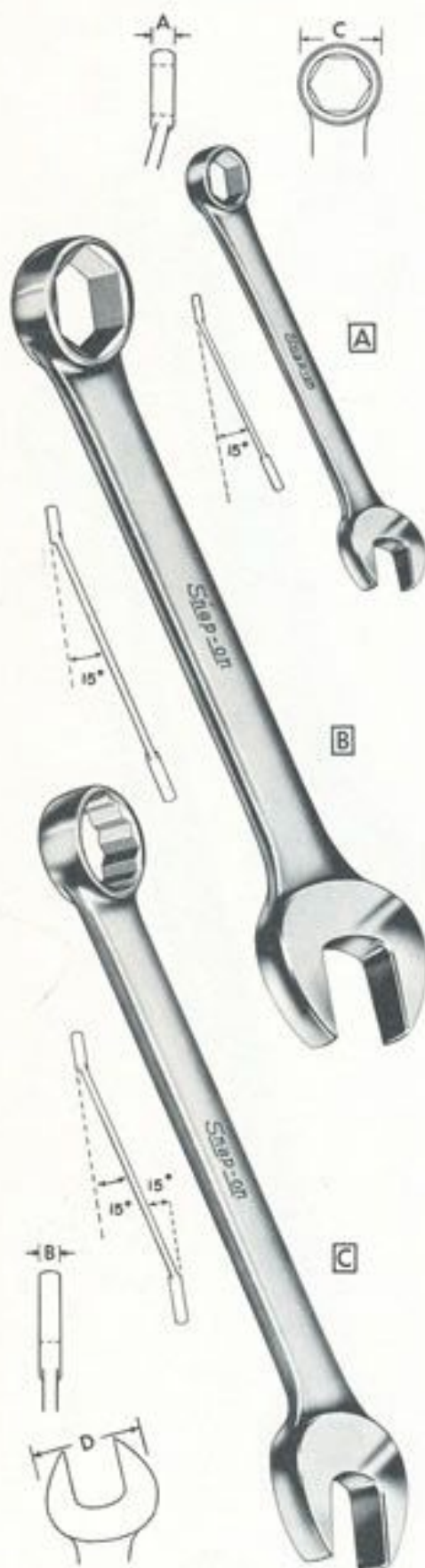
Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



COMBINATION WRENCHES

A MIDGET SERIES

Chrome Plated Finish

| SINGLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 1/4" | OXI-8 | 5/16" | 1/8" | 3/8" | 13/32" | 3 1/4" |
| 5/16" | OXI-9 | 11/16" | 3/16" | 7/8" | 15/16" | 3 5/8" |
| 3/8" | OXI-10 | 13/16" | 1/4" | 1 1/8" | 1 1/16" | 3 7/8" |
| 11/16" | OXI-11 | 1 1/16" | 5/16" | 1 1/4" | 1 1/8" | 3 15/16" |
| 3/4" | OXI-12 | 1 1/8" | 3/8" | 1 1/2" | 1 3/4" | 3 7/8" |

OXI-705-K Set. Contains one each of the five wrenches listed above, in the C-528 kit bag.

OXI-705 Set. Above set without the kit bag.

B SHORT SERIES

Chrome Plated Finish

| SINGLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 5/8" | OEX-1005 | 3/4" | 1 1/4" | 1 1/2" | 1 3/4" | 5" |
| 3/4" | OEX-1205 | 1 1/4" | 1 3/4" | 1 3/4" | 1 7/8" | 5 1/4" |
| 7/8" | OEX-1405 | 1 3/4" | 1 7/8" | 1 7/8" | 2" | 5 3/4" |
| 1 1/8" | OEX-1605 | 2" | 2 1/4" | 2 1/4" | 2 1/2" | 6 1/4" |

OEXH-704-K Set. Contains one each of the above four wrenches, in C-508 kit bag.

OEXH-704 Set. Above set without the kit bag.

C SHORT DOUBLE OFFSET SERIES

Chrome Plated Finish

| DOUBLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 3/8" | OEX-120A | 1/2" | 5/8" | 5/8" | 3/4" | 5 1/4" |
| 1/2" | OEX-140A | 5/8" | 3/4" | 3/4" | 7/8" | 5 1/2" |
| 5/8" | OEX-160A | 3/4" | 1" | 1" | 1 1/8" | 5 3/4" |
| 3/4" | OEX-180A | 7/8" | 1 1/8" | 1 1/8" | 1 1/4" | 6 1/8" |
| 7/8" | OEX-200A | 1" | 1 1/4" | 1 1/4" | 1 3/8" | 6 3/4" |

OEXA-705-K Set. Contains one each of the above five wrenches, in C-508 kit bag.

OEXA-705 Set. Above set without the kit bag.

COMBINATION WRENCHES

BOXOCKET End gives safe leverage for breaking loose tight nuts or for final tightening . . . this head is offset 15° to give handle clearance over obstructions.

Open End provides fast nut turning and works on many nuts where the "Boxocket" cannot be used.

A SHORT SERIES

Chrome Plated Finish

| DOUBLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 3/8" | OEX-100 | 3/16" | 1/8" | 3/16" | 3/16" | 5" |
| 3/8" | OEX-120 | 1/8" | 3/16" | 1/8" | 3/16" | 5 1/2" |
| 3/8" | OEX-140 | 1/8" | 3/16" | 1/8" | 3/16" | 5 3/4" |
| 1/2" | OEX-160 | 3/16" | 1/4" | 3/16" | 1/4" | 6" |
| 1/2" | OEX-180 | 3/16" | 1/4" | 3/16" | 1/4" | 6 1/4" |
| 1/2" | OEX-200 | 1/8" | 3/16" | 1/8" | 3/16" | 6 1/2" |
| 1/2" | OEX-220 | 3/16" | 1/4" | 3/16" | 1/4" | 6 3/4" |
| 1/2" | OEX-240 | 3/16" | 1/4" | 3/16" | 1/4" | 6 3/4" |

OEXS-708-K Set. Contains one each of the above eight wrenches, in C-808 kit bag.
OEXS-708 Set. Above set without the kit bag.

B LONG SERIES

Chrome Plated Finish

| DOUBLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 3/8" | OEX-14 | 3/16" | 1/8" | 3/16" | 3/16" | 7 1/2" |
| 3/8" | OEX-16 | 3/16" | 1/8" | 3/16" | 3/16" | 7 3/4" |
| 3/8" | OEX-18 | 1/8" | 3/16" | 1/8" | 3/16" | 7 3/4" |
| 3/8" | OEX-20 | 1/8" | 3/16" | 1/8" | 3/16" | 8 1/4" |
| 1/2" | OEX-22 | 3/16" | 1/4" | 3/16" | 1/4" | 9 1/4" |
| 1/2" | OEX-24 | 3/16" | 1/4" | 3/16" | 1/4" | 9 3/4" |
| 1/2" | OEX-26 | 1/8" | 3/16" | 1/8" | 3/16" | 11" |
| 1/2" | OEX-28 | 1/8" | 3/16" | 1/8" | 3/16" | 11 1/4" |
| 1/2" | OEX-30 | 3/16" | 1/4" | 3/16" | 1/4" | 13" |
| 1/2" | OEX-32 | 3/16" | 1/4" | 3/16" | 1/4" | 14" |
| 1/2" | OEX-34 | 1/8" | 3/16" | 1/8" | 3/16" | 15" |
| 1/2" | OEX-36 | 3/16" | 1/4" | 3/16" | 1/4" | 15 3/4" |
| 1/2" | OEX-40 | 3/16" | 1/4" | 3/16" | 1/4" | 17" |
| 1/2" | OEX-42 | 3/16" | 1/4" | 3/16" | 1/4" | 18" |
| 1/2" | OEX-44 | 3/16" | 1/4" | 3/16" | 1/4" | 19" |
| 1/2" | OEX-46 | 3/16" | 1/4" | 3/16" | 1/4" | 20 3/4" |
| 1/2" | OEX-48 | 3/16" | 1/4" | 3/16" | 1/4" | 21 3/4" |
| 1/2" | OEX-52 | 3/16" | 1/4" | 3/16" | 1/4" | 22 1/4" |

OEX-718-K Set. Eighteen wrenches—OEX-14 through OEX-52 long series, in C-1818 kit bag.

OEX-718 Set. Above set without the kit bag.

OEX-715-K Set. Fifteen wrenches—OEX-100 and OEX-120 short series and OEX-14 through OEX-40 long series, in C-1508 kit bag.

OEX-715 Set. Above set without the kit bag.

OEX-712-K Set. Twelve wrenches—OEX-100 and OEX-120 short series and OEX-14 through OEX-32 long series, in C-1218 kit bag.

OEX-712 Set. Above set without the kit bag.

OEXL-708-K Set. Eight wrenches—OEX-14, 16, 18, 20, 22, 24, 26, and 28, in C-818 kit bag.

OEXL-708 Set. Above set without the kit bag.

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE

COMBINATION WRENCHES

These black finish SNAP-ON Combination Wrenches are identical in quality to the chromium plated tools on opposite page—except in finish. Flawless chromium plating provides the best protection against rust as well as the best appearance—it also costs money. Black finish passes substantial saving on to you.

A SHORT SERIES

Black Finish

| DOUBLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 5/16" | GOEX-100 | 3/32" | 1/16" | 11/32" | 3/16" | 5" |
| 3/8" | GOEX-120 | 1/16" | 3/32" | 11/16" | 3/8" | 5 1/2" |
| 7/16" | GOEX-140 | 3/16" | 1/4" | 1 1/16" | 7/16" | 5 3/4" |
| 1/2" | GOEX-160 | 1/8" | 1/4" | 1 1/8" | 13/16" | 5 7/8" |
| 9/16" | GOEX-180 | 3/16" | 5/16" | 1 1/2" | 1 1/16" | 6" |
| 5/8" | GOEX-200 | 1/2" | 3/8" | 1 5/8" | 1 3/8" | 6 1/4" |
| 11/16" | GOEX-220 | 5/16" | 1/2" | 1 7/8" | 1 5/8" | 6 3/8" |
| 3/4" | GOEX-240 | 5/8" | 5/8" | 1 3/4" | 1 1/2" | 6 3/4" |

GOEX-708-K Set. Contains one each of the above eight wrenches in C-808 kit bag.
GOEX-708 Set. Above set without the kit bag.

B LONG SERIES

Black Finish

| DOUBLE HEXAGON | | Head Depths | | Head Diameters | | Overall Length |
|----------------|-----------|-------------|------------|----------------|------------|----------------|
| Wrench Size | Stock No. | Box End A | Open End B | Box End C | Open End D | |
| 3/16" | GOEX-14 | 3/16" | 1/16" | 11/32" | 3/16" | 7 1/2" |
| 1/4" | GOEX-16 | 3/16" | 1/4" | 1 1/16" | 1/4" | 7 5/8" |
| 5/16" | GOEX-18 | 1/32" | 1/4" | 1 1/8" | 13/16" | 7 3/4" |
| 3/8" | GOEX-20 | 1/32" | 3/8" | 1 1/4" | 1 1/8" | 8 1/4" |
| 1/2" | GOEX-22 | 3/8" | 1/2" | 1 1/2" | 1 1/4" | 9 1/4" |
| 5/8" | GOEX-24 | 3/8" | 5/8" | 1 3/4" | 1 3/4" | 9 3/4" |
| 11/16" | GOEX-26 | 1/2" | 3/4" | 1 7/8" | 1 7/8" | 11" |
| 3/4" | GOEX-28 | 1/2" | 3/4" | 1 7/8" | 1 7/8" | 11 3/4" |
| 13/16" | GOEX-30 | 5/8" | 3/4" | 1 7/8" | 1 7/8" | 13" |
| 1" | GOEX-32 | 5/8" | 5/8" | 1 7/8" | 2 1/4" | 14" |
| 1 1/16" | GOEX-34 | 11/16" | 1 1/2" | 1 7/8" | 2 3/4" | 15" |
| 1 1/4" | GOEX-36 | 3/4" | 1 1/2" | 1 7/8" | 2 3/4" | 15 3/4" |
| 1 1/2" | GOEX-40 | 3/4" | 1 1/2" | 1 7/8" | 2 3/4" | 17" |
| 1 3/4" | GOEX-42 | 3/4" | 1 1/2" | 1 7/8" | 2 3/4" | 18" |
| 1 7/8" | GOEX-44 | 3/4" | 1 1/2" | 2" | 2 3/4" | 19" |
| 2" | GOEX-46 | 3/4" | 1 1/2" | 2" | 2 3/4" | 20 1/4" |
| 2 1/8" | GOEX-48 | 3/4" | 1 1/2" | 2 1/8" | 3 1/4" | 21 1/4" |
| 2 1/4" | GOEX-52 | 3/4" | 1 1/2" | 2 1/4" | 3 1/4" | 22 1/4" |

GOEX-718-K Set. Eighteen wrenches—GOEX-14 through GOEX-52 long series, in C-1818 kit bag.

GOEX-718 Set. Above set without the kit bag.

GOEX-715-K Set. Fifteen wrenches—GOEX-100 and GOEX-120 short series and GOEX-14 through GOEX-40 long series, in C-1508 kit bag.

GOEX-715 Set. Above set without the kit bag.

GOEX-712-K Set. Twelve wrenches—GOEX-100 and GOEX-120 short series and GOEX-14 through GOEX-32 long series, in C-1218 kit bag.

GOEX-712 Set. Above set without the kit bag.

GOEX-708-K Set. Eight wrenches—GOEX-14, 16, 18, 20, 22, 24, 26 and 28, in C-818 kit bag.

GOEX-708 Set. Above set without the kit bag.





Snap-on**

INDUSTRIAL PLIERS

A top quality line with many "built-in" features that assure smoother, longer operational service. Ask your SNAP-ON man to show you the complete line.



The correct grip for various jobs is provided by three different handle shapes—full-fashioned, bow or straight.



Most models are available with either forged or stamped VACUUM-GRIP design or smooth handles.



Stud assembled joints are made in two styles. The countersunk head style provides close gripping against flat surfaces.

*Trade-Mark of Snap-on Tools Corporation

HERE ARE A FEW OF THE QUALITY FEATURES THAT MAKE **Snap-on** PLIERS OUTWEAR AND OUTPERFORM ORDINARY PLIERS

- Careful design provides greatest cutting and gripping power with least amount of handle pressure.
- Proper balance and weight makes day-long operation easy.
- Deep, sharp teeth give a firm non-slip grip.
- Induction hardened cutting edges give fast, easy cutting with long service life.
- Cutting edges overlap to prevent dulling and increase cutting efficiency.
- Joints are counterbored, drilled, reamed and countersunk on one machine with one setting to assure perfect fitting and properly aligned joints.
- Joint areas are coined to assure a smooth, flat bearing surface.
- Rivets are hot pressed into position to provide maximum bearing surface for smooth operation.
- All SNAP-ON pliers and cutters are selectively heat treated and tempered to provide varying degrees of hardness to jaws, joints, cutting edges and handles.
- Studs and rivets are softer than the joint area and can be replaced when worn to give you added years of service.
- Self opening spring models are easily adjusted for tension and amount of opening.
- Special stud construction provides proper joint tension which does not work loose in operation.
- Flat, wide hand grips provide greater hand comfort for the user.
- SNAP-ON's sharpening and reconditioning service is available at nominal cost. This service can greatly increase the useful life of your pliers.

PLASTIC HANDLE COATING

New available on special order only

Plier handles are dipped in the plastic and then heat cured to make a secure bond. The coating is smooth and resilient, it has high dielectric qualities, and is very resistant to abrasion.

Snap-on Tools

SERVING INDUSTRY
EVERYWHERE

INDUSTRIAL PLIERS



A

A STANDARD NEEDLE NOSE

Polished head, steel buffed finish, and stamped VACUUM-GRIP design.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|------------------|
| 94 | $2\frac{1}{2}$ " | $4\frac{1}{2}$ " |
| 095 | $1\frac{1}{2}$ " | $5\frac{3}{4}$ " |
| 95 | $1\frac{1}{8}$ " | 6" |
| 096 | $2\frac{1}{4}$ " | $6\frac{3}{4}$ " |



B

B MECHANICS NEEDLE NOSE

Polished head, steel buffed finish, and forged VACUUM-GRIP design.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|------------------|
| 96 | $2\frac{1}{4}$ " | $7\frac{1}{8}$ " |



C

C BLACK FINISH NEEDLE NOSE

Black oxide finish with partially polished head and stamped VACUUM-GRIP design.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|------------------|
| 96B | $2\frac{1}{4}$ " | $7\frac{1}{8}$ " |



D

D NATURAL FINISH NEEDLE NOSE

Semi-polished head and smooth sand blasted handles.

| Without Handle Spring Stock No. | With Handle Spring Stock No. | Tip Length | Overall Length |
|---------------------------------------|------------------------------------|------------------|------------------|
| 94E | 94S | $2\frac{1}{2}$ " | $4\frac{1}{2}$ " |
| 095E | 095S | $1\frac{1}{2}$ " | $5\frac{3}{4}$ " |
| 95E | 95S | $1\frac{1}{8}$ " | 6" |
| 096E | 096S | $2\frac{1}{4}$ " | $6\frac{3}{4}$ " |
| 96E | 96S | $2\frac{1}{4}$ " | $7\frac{1}{8}$ " |



E

E HEAVY DUTY NEEDLE NOSE

Polished head, steel buffed finish, and stamped VACUUM-GRIP design.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|----------------|
| 97 | $3\frac{3}{4}$ " | 8" |



F

F NATURAL FINISH HEAVY DUTY NEEDLE NOSE

Semi-polished head and smooth sand blasted handles.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|----------------|
| 97E | $3\frac{3}{4}$ " | 8" |



G

G ELECTRONIC GRIPPER-CUTTERS

Natural finish, smooth sand blasted handles and machine polished heads. Designed especially for electronic and radio work . . . cutters are placed only $\frac{1}{8}$ " from the tip so that small wires can be cut in very close working places. A lining-up pin in the jaws maintains true alignment of the cutter blades and adds to the gripping strength of the tips. A special adjustable stud and nut allows jaw adjustment to the desired tension.

On the spring model an anti-turn device prevents the spring from moving out of position. Note: A smaller size electronic gripper-cutter is shown on page 58.

| Without Handle Spring Stock No. | With Handle Spring Stock No. | Jaw Length | Overall Length |
|---------------------------------------|------------------------------------|------------------|------------------|
| 961E | 961S | $1\frac{1}{8}$ " | $6\frac{1}{4}$ " |

INDUSTRIAL PLIERS

Snap-on Tools
FOR PRODUCTION
AND MAINTENANCE

A STANDARD NEEDLE NOSE WITH CUTTERS

Polished head, steel buffed finish and stamped VACUUM-GRIP design on handles.

| Stock No. | Tip Length | Overall Length |
|-----------|--------------------|------------------|
| 194 | $\frac{27}{32}$ " | $4\frac{1}{2}$ " |
| 1095 | $1\frac{1}{2}$ " | $5\frac{3}{4}$ " |
| 195 | $1\frac{13}{16}$ " | 6" |
| 1096 | $2\frac{1}{32}$ " | $6\frac{3}{4}$ " |

B MECHANICS NEEDLE NOSE WITH CUTTERS

Polished head, steel buffed finish and forged VACUUM-GRIP design on handles.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|------------------|
| 196 | $2\frac{1}{4}$ " | $7\frac{1}{4}$ " |

C BLACK FINISH NEEDLE NOSE WITH CUTTERS

Black oxide finish with partially polished head and stamped VACUUM-GRIP design on handles.

| Stock No. | Tip Length | Overall Length |
|-----------|------------------|------------------|
| 196B | $2\frac{1}{4}$ " | $7\frac{1}{4}$ " |

D NATURAL FINISH NEEDLE NOSE WITH CUTTERS

Semi-polished head and smooth sand blasted handles.

| Without Spring Handle Stock No. | With Spring Handle Stock No. | Tip Length | Overall Length |
|---------------------------------------|------------------------------------|--------------------|------------------|
| 194E | 194S | $\frac{27}{32}$ " | $4\frac{1}{2}$ " |
| 1095E | 1095S | $1\frac{1}{2}$ " | $5\frac{3}{4}$ " |
| 195E | 195S | $1\frac{13}{16}$ " | 6" |
| 1096E | 1096S | $2\frac{1}{32}$ " | $6\frac{3}{4}$ " |
| 196E | 196S | $2\frac{1}{4}$ " | $7\frac{1}{4}$ " |

E BENT NEEDLE NOSE

Semi-polished head, sand blasted handles and stamped VACUUM-GRIP design on handles.

| Stock No. | Tip Length | Overall Length |
|-----------|-------------------|------------------|
| 497 | $3\frac{3}{16}$ " | $6\frac{3}{8}$ " |

F PIN GRIPPING NEEDLE NOSE

Semi-polished head, sand blasted handles and stamped VACUUM-GRIP design on handles.

| Stock No. | Tip Length | Overall Length |
|-----------|-------------------|------------------|
| 597 | $3\frac{3}{16}$ " | $7\frac{1}{8}$ " |

G ELECTRONIC GRIPPER-CUTTER

Natural finish, smooth sand blasted handles and machine polished head. Entire joint mating surfaces are coined flat to give maximum contact of the halves which are joined by an electronically heated rivet. These features provide a joint which will maintain jaw alignment and cutting ability out at the working tip. The spring opens the jaws automatically, and it is easily removed if not desired. Cutter is set $\frac{1}{32}$ " from the tip. Other electronic gripper-cutters on page 57.

| Stock No. | Jaw Length | Overall Length |
|-----------|------------------|------------------|
| 9515 | $1\frac{1}{8}$ " | $5\frac{3}{8}$ " |



Snap-on Tools

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A

A THIN NOSE DUCK BILL

Semi-polished head and smooth sand blasted handles.

| Stock No. | Tip Length | Tip Width | Overall Length |
|-----------|-------------------|-----------------|-------------------|
| 395E | 2 $\frac{3}{8}$ " | $\frac{3}{4}$ " | 6 $\frac{1}{2}$ " |



B

B STANDARD DUCK BILL

Semi-polished head and smooth sand blasted handles.

| Stock No. | Tip Length | Tip Width | Overall Length |
|-----------|-------------------|-----------------|-------------------|
| 60R | 1 $\frac{5}{8}$ " | $\frac{5}{8}$ " | 7 $\frac{3}{4}$ " |



C

C SHORT NEEDLE NOSE

Semi-polished head and smooth sand blasted handles.

| Stock No. | Tip Length | Overall Length |
|-----------|-------------------|-------------------|
| 60C | 1 $\frac{5}{8}$ " | 7 $\frac{3}{4}$ " |



D

D STANDARD MIDGET CUTTER

Polished head, sand blasted handles and stamped VACUUM-GRIP design on handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|--------------------|-------------------|
| 184 | 1 $\frac{3}{32}$ " | 4 $\frac{1}{4}$ " |



E

E NATURAL FINISH MIDGET CUTTER

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|--------------------|-------------------|
| 184E | 1 $\frac{3}{32}$ " | 4 $\frac{1}{4}$ " |



F

F NATURAL FINISH MIDGET CUTTER WITH SPRING

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|--------------------|-------------------|
| 184S | 1 $\frac{3}{32}$ " | 4 $\frac{1}{4}$ " |

INDUSTRIAL PLIERS

Snap-on Tools

FOR PRODUCTION
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A NATURAL FINISH LONG NOSE CUTTERS

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|-----------------|------------------|
| 184L | $\frac{3}{8}$ " | $4\frac{1}{2}$ " |
| 85L | $\frac{3}{4}$ " | $5\frac{1}{4}$ " |

B NATURAL FINISH LONG NOSE CUTTERS WITH SPRING

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|-----------------|------------------|
| 184LS | $\frac{3}{8}$ " | $4\frac{1}{2}$ " |
| 85LS | $\frac{3}{4}$ " | $5\frac{1}{4}$ " |

C STANDARD CUTTERS

Polished head, steel buffed finish and forged VACUUM-GRIP design on handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|-----------------|--------------------|
| 85 | $\frac{3}{8}$ " | $4\frac{7}{8}$ " |
| 86 | $\frac{3}{4}$ " | $5\frac{13}{16}$ " |

D HEAVY DUTY STANDARD CUTTER

Polished head, steel buffed finish and forged VACUUM-GRIP design on handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|------------------|-------------------|
| 87 | $1\frac{1}{8}$ " | $7\frac{7}{16}$ " |

E BLACK FINISH CUTTERS

Black oxide finish with partially polished head and stamped VACUUM-GRIP design on handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|------------------|-------------------|
| 85B | $\frac{3}{8}$ " | $4\frac{7}{8}$ " |
| 86B | $\frac{3}{4}$ " | $6\frac{3}{8}$ " |
| 87B | $1\frac{1}{8}$ " | $7\frac{7}{16}$ " |

F NATURAL FINISH CUTTERS

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|------------------|-------------------|
| 85E | $\frac{3}{8}$ " | $4\frac{7}{8}$ " |
| 86E | $\frac{3}{4}$ " | $6\frac{3}{8}$ " |
| 87E | $1\frac{1}{8}$ " | $7\frac{7}{16}$ " |



A



B



C



D



E



F

Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



A



B



C



D



E



F

INDUSTRIAL PLIERS

A NATURAL FINISH CUTTERS WITH SPRING

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|-------------------|------------------|
| 855 | $\frac{3}{4}$ " | $4\frac{1}{8}$ " |
| 865 | $\frac{3}{4}$ " | $6\frac{1}{8}$ " |
| 875 | $\frac{15}{16}$ " | $7\frac{1}{2}$ " |

B STANDARD HIGH LEVERAGE CUTTER

Polished head and sand blasted handles with stamped VACUUM-GRIP design.

| Stock No. | Jaw Length | Overall Length |
|-----------|-----------------|------------------|
| 387 | $\frac{3}{4}$ " | $7\frac{1}{2}$ " |

C NATURAL FINISH HIGH LEVERAGE CUTTER

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|-----------------|------------------|
| 387E | $\frac{3}{4}$ " | $7\frac{1}{2}$ " |

D LONG REACH CUTTER

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|--------------------|--------------------|
| 60D | $1\frac{15}{16}$ " | $6\frac{15}{16}$ " |

E LONG REACH CUTTER WITH SPRING

Semi-polished head and smooth sand blasted handles.

| Stock No. | Jaw Length | Overall Length |
|-----------|--------------------|--------------------|
| 60DS | $1\frac{15}{16}$ " | $6\frac{15}{16}$ " |

F END CUTTER

Semi-polished head and sand blasted handles with stamped VACUUM-GRIP design.

| Stock No. | Jaw Width | Overall Length |
|-----------|------------------|------------------|
| 17 | $1\frac{1}{8}$ " | $7\frac{1}{4}$ " |

INDUSTRIAL PLIERS

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

A MIDGET GRIPPER

Polished head, riveted joint, sand blasted handle and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-----------------|------------------|
| 5 | $\frac{1}{8}$ " | $4\frac{1}{2}$ " |

B MIDGET ANGLE NOSE GRIPPER

Nickel plated, two-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|------------------|
| 50 | $\frac{5}{16}$ " | $4\frac{1}{2}$ " |

C MIDGET ANGLE NOSE GRIPPER

Nickel plated, three-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-----------------|------------------|
| 105 | $\frac{3}{4}$ " | $4\frac{1}{2}$ " |

D STANDARD COMBINATIONS

Nickel plated, two-position slip joint, countersunk stud and forged VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|------------------|
| 34 | $\frac{1}{4}$ " | $4\frac{1}{2}$ " |
| 35 | $\frac{5}{16}$ " | 5" |
| 36 | $\frac{3}{8}$ " | $6\frac{1}{2}$ " |

E THIN NOSE COMBINATION

Nickel plated, two-position slip joint, countersunk stud and forged VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-----------------|------------------|
| 65 | $\frac{3}{8}$ " | $5\frac{1}{2}$ " |

F HEAVY DUTY COMBINATION

Nickel plated, two-position slip joint, countersunk stud and forged VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-----------------|------------------|
| 137 | $\frac{1}{2}$ " | $7\frac{1}{2}$ " |

G INTERLOCKING JOINT GRIPPER

Nickel plated, five-position interlocking joint, stamped VACUUM-GRIP design handles. The joint consists of a raised curved section on one plier handle which interlocks into one of five recessed curved grooves in the other handle. The pressure side of each groove is made perpendicular to the handle to prevent any tendency to "ride under" the interlocking section. This interlocking construction prevents slipping regardless of the pressure applied and permits parallel jaw openings from $\frac{3}{16}$ " to approximately $1\frac{1}{8}$ ". Deep cut teeth are set at an angle, pipe wrench fashion, to bite into round or odd shaped objects for a firmer, safer grip.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-----------------|------------------|
| 90 | $\frac{1}{4}$ " | $9\frac{1}{8}$ " |



Snap-on Tools

SERVING INDUSTRY
EVERYWHERE



A



B



C



D



E



F



G

INDUSTRIAL PLIERS

A BLACK FINISH HEAVY DUTY COMBINATION

Black oxide finish with partially polished head, two-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-------------------|------------------|
| 137B | $\frac{13}{32}$ " | $7\frac{1}{2}$ " |

B NATURAL FINISH HEAVY DUTY COMBINATION

Semi-polished head, two-position slip joint and smooth sand blasted handles.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-------------------|------------------|
| 137E | $\frac{13}{32}$ " | $7\frac{1}{2}$ " |

C HEAVY DUTY GRIPPERS

Nickel plated, notch-type wire cutter, two-position slip joint, countersunk stud and forged VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-------------------|------------------|
| 47 | $\frac{13}{32}$ " | $7\frac{1}{2}$ " |
| 49 | $\frac{1}{2}$ " | $9\frac{1}{8}$ " |

D BLACK FINISH HEAVY DUTY GRIPPERS

Black oxide finish, with partially polished head, notch-type wire cutter, two-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-------------------|------------------|
| 44B | $\frac{13}{32}$ " | $4\frac{1}{2}$ " |
| 45B | $\frac{3}{8}$ " | $5\frac{3}{4}$ " |
| 46B | $\frac{5}{16}$ " | $6\frac{1}{4}$ " |
| 47B | $\frac{13}{32}$ " | $7\frac{1}{2}$ " |
| 49B | $\frac{1}{2}$ " | $9\frac{1}{8}$ " |

E NATURAL FINISH HEAVY DUTY GRIPPERS

Semi-polished head, smooth sand blasted handles, notch-type wire cutter and two-position slip joint.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|-------------------|------------------|
| 47E | $\frac{13}{32}$ " | $7\frac{1}{2}$ " |
| 49E | $\frac{1}{2}$ " | $9\frac{1}{8}$ " |

F ANGLE NOSE GRIPPER

Nickel plated, four-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|-------------------|
| 9C | $\frac{3}{16}$ " | $8\frac{3}{32}$ " |

G BLACK FINISH ANGLE NOSE GRIPPER

Black oxide finish with partially polished head, four-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|-------------------|
| 9CB | $\frac{3}{16}$ " | $8\frac{3}{32}$ " |

MISCELLANEOUS SPECIAL PLIERS

Snap-on Tools

FOR PRODUCTION
AND MAINTENANCE

A LINEMAN'S COMBINATION

Polished head, sand blasted handles with stamped VACUUM-GRIP design.

| Stock No. | Cutter Length | Head Thickness | Overall Length |
|-----------|-----------------|-----------------|--------------------|
| 57R | $\frac{5}{8}$ " | $\frac{3}{2}$ " | $7\frac{3}{4}$ " |
| 58R | $\frac{3}{4}$ " | $\frac{1}{2}$ " | $8\frac{13}{32}$ " |

B THIN ANGLE NOSE GRIPPERS

Polished head, sand blasted handles with stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|------------------|
| 208 | $\frac{5}{16}$ " | $7\frac{3}{4}$ " |

C CORBIN HOSE CLAMP PLIER

Semi-polished head, sand blasted handles, two-position slip joint and stamped VACUUM-GRIP design.

| Stock No. | Jaw Thickness | Overall Length |
|-----------|------------------|------------------|
| HCP-48 | $\frac{3}{16}$ " | $8\frac{1}{8}$ " |

D BRAKE SPRING PLIER

Cadmium plated sand blasted finish with stamped VACUUM-GRIP design.

| Stock No. | Overall Length | Replacement Hook |
|-----------|-------------------|------------------|
| 31 | $13\frac{3}{4}$ " | 31-3 |

E BRAKE SPRING PLIER

Cadmium plated sand blasted finish with stamped VACUUM-GRIP design.

Handle ends work on Bendix and Lockheed brake springs.

| Stock No. | Overall Length | Replacement Hook |
|-----------|-------------------|------------------|
| 131 | $13\frac{3}{4}$ " | 31-3 |

F SNAP RING PLIER

Offset tip—steel buff finish with stamped VACUUM-GRIP design.

| Stock No. | Tip Width | Overall Length |
|-----------|------------------|--------------------|
| 70A | $\frac{5}{16}$ " | $8\frac{13}{16}$ " |

G SNAP RING PLIER

Straight tip—steel buff finish with stamped VACUUM-GRIP design.

| Stock No. | Tip Width | Overall Length |
|-----------|------------------|------------------|
| 70B | $\frac{3}{32}$ " | $8\frac{3}{8}$ " |



A



B



C



D



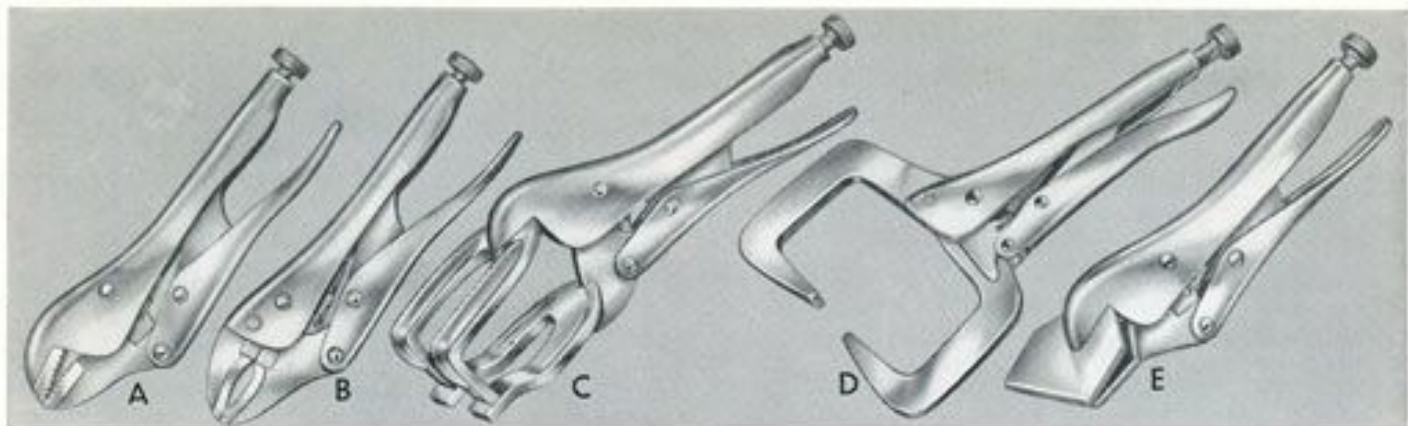
E



F



G



WISE-GRIP WRENCHES—CUTTERS—BENDERS—CLAMPS

A Standard Vise-Grip Wrenches. Indispensable tools for all types of jobs. Double lever action locks the jaws on the work with a 1-ton pressure . . . grips all shapes and will not slip. It works in close quarters, at any angle . . . adjusts to ratchet-like action. Substitutes for vise, clamp, pipe wrench or toggle press. Made of fine alloy steel, nickel plated.

GA-27 7" Vise-Grip Wrench.
GA-28 10" Vise-Grip Wrench.

B Vise-Grip with Wire Cutter. Actually 8 tools in one for it is an adjustable end wrench, thin nose plier, pipe wrench, portable toggle press, locking wrench, clamp, vise, wire and bolt cutter. TON-GRIP permits tremendous pressure on any object up to 1 1/4". Handles round work up to 1 1/8".

GA-91 7" Vise-Grip with Cutter.
GA-92 10" Vise-Grip with Cutter.

C ★GA-90 Vise-Grip Welding Clamp. With this tool parts are aligned almost instantly and held in position leaving both hands free. The special U-shaped jaws provide perfect visibility and working room. End screw provides quick jaw opening adjustment up to 1 1/2". Ideal for fender work, soldering, riveting, etc.

D GA-95 Vise-Grip "C" Clamp. Much faster to use than ordinary "C" clamps. Jaws are adjustable by means of the end screw, to hold objects up to 3 1/2" in diameter. When the pieces to be clamped are aligned, the Vise-Grip is placed over the work and a squeeze of the hand locks it in position. The powerful grip and fast action plus the clearance advantages of a "C" clamp, makes it easy to hold awkward and cumbersome pieces together for assembly or other operations.

E GA-93 Vise-Grip Bending Tool. Wide jaws make this Vise-Grip ideal for sheet metal work . . . provide a solid grip for twisting, bending, shaping or pulling operations. Eliminates the tiresome "hand-gripping" necessary when ordinary pliers are used . . . clamps on to the work leaving hands free. Useful for upholstery work as material can be stretched with no danger of unraveling. 8" long, jaws 3 1/4" wide, throat depth 1 1/4".



WIRE STRIPPER

A GA-116 Wire Stripper. You can do a perfect job of stripping wire with one squeeze of your hand with this new tool. Sturdily constructed of hardened steel, it features automatic grip release and replaceable hardened cutting blades that operate on all types of insulation. One squeeze of the handles strips the wire clean, ready for connecting. The hardened cutting blades have six notches and handle 8-10-12-14-16-18-20-22 gauge wire. They are easily replaced when necessary. Length of strip up to 1" is controlled by adjustable stop. Entire tool is nickel plated.

★GA-116-1 Set of Blades.

HAND BOLT CUTTER

B ★PBC-6A Hand Bolt Cutter. The cutting edges of this tool are set at a 45° angle to permit cutting in close quarters while keeping the hand out in the open in a comfortable position. Allows you to reach bolts or pins that are set close together without scraping the hand or knuckles. Compound leverage action of the handles makes cutting easy. Handles are dipped in plastic to provide a firm, non-slip grip. Recommended for cotter pins, annealed bolts, etc. Overall length 9". Maximum cutting capacity of this bolt cutter is 3/4".

HIGH SPEED HOLE SAWS

High speed cutting edge is welded to a tough alloy steel back that absorbs shocks and prevents shattering due to overload or twist. Long side grooves permit removal of cuttings. Hexagon shank arbors fit 1/2" or larger drill chucks. High speed pilot drills are 1/4" diameter.

LHS-1 Arbor. Fits 1/4" to 1 1/8" saws.

LHS-2 Arbor. Fits 1 1/4" and larger saws.

★LHS-4 Pilot Drill for above arbors.

| Stock No. | Dia. | Stock No. | Dia. | Stock No. | Dia. |
|-----------|--------|-----------|--------|-----------|--------|
| ★LHS-20 | 3/8" | ★LHS-42 | 1 1/8" | ★LHS-72 | 2 1/4" |
| ★LHS-24 | 3/4" | ★LHS-44 | 1 1/4" | ★LHS-76 | 2 3/8" |
| ★LHS-26 | 1 1/8" | ★LHS-48 | 1 1/2" | ★LHS-80 | 2 1/2" |
| ★LHS-28 | 1 1/4" | ★LHS-52 | 1 3/8" | ★LHS-84 | 2 5/8" |
| ★LHS-32 | 1 1/2" | ★LHS-56 | 1 5/8" | ★LHS-88 | 2 3/4" |
| ★LHS-34 | 1 3/8" | ★LHS-60 | 1 7/8" | ★LHS-92 | 2 7/8" |
| ★LHS-36 | 1 5/8" | ★LHS-64 | 2" | ★LHS-96 | 3" |
| ★LHS-38 | 1 3/4" | ★LHS-68 | 2 1/8" | ★LHS-112 | 3 1/2" |
| ★LHS-40 | 1 1/2" | ★LHS-68 | 2 1/4" | ★LHS-128 | 4" |

UNIVERSAL RETHREADING TOOL

TR-20 Universal Rethreader. This tool has a capacity of 1/2" to 5" diameter for bolt threads and 1/4" to 4" for pipe threads. Seven chasers with two sizes each are included with the TR-20 to recut threads from 6 to 24 pitch. The TR-20-10 Chaser is available as an additional unit. Chasers are machined from the highest quality tool steel and are carefully heat treated to assure long wearing cutting edges. A metal ring is provided for convenience in holding the chasers.

The chaser holding bracket of the tool is so designed that threads can be recut right up to a beveled edge or square shoulder. The adjustable jaw has a liner of soft brass to protect the threads from further damage while being recut. This liner is subject to hard wear but it can be easily replaced.



★TR-20-5 Soft Brass Liner
Chasers—Stock No. and Threads

| | |
|---------------------------|---------------------------|
| ★TR-20-10 4 & 5 threads | ★TR-20-14 11 & 12 threads |
| ★TR-20-11 6 & 7 threads | ★TR-20-15 13 & 14 threads |
| ★TR-20-12 8 & 9 threads | ★TR-20-16 16 & 18 threads |
| ★TR-20-13 10 & 11 threads | ★TR-20-17 20 & 24 threads |

Snap-on

Octo-Grip

SCREW DRIVERS

Better-Made . . . Longer-Lasting

- **Shock-proof handles** . . . tough black plastic proved best under actual working conditions. They are shock-proof and practically unbreakable.
- **Roll-proof handles** . . . SNAP-ON "Octo-Grip" handles have alternate sides relieved and a rounded ridge at each corner. Shape prevents tools from rolling when laid down.
- **Power-grip handles** . . . the special "Octo-Grip" shape provides a powerful turning grip without hurting the hand.
- **Blades are tough** . . . made of very high grade alloy steel, heat treated the entire length to develop maximum strength and toughness.
- **Blades well anchored** . . . extra long crimped wings on shanks prevent turning in the handles.

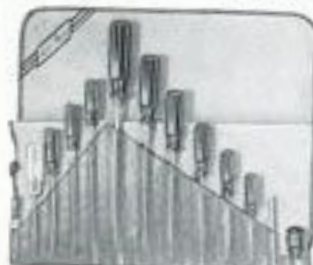


STANDARD TIP



STANDARD TIP

STANDARD TIP DRIVER SET



SDS-130-K Screw Driver Set. 13 tools SD-1, SD-2, SD-4, SD-6, SD-8, SD-12, SD-143, SD-146, SD-1410, SD-145, SD-234, No. 1011 and GA-12 Screw Starter. In C-132B Kit bag.

SDS-130 Set. Above set, tools only.

"OCTO-GIP" STANDARD TIP SCREW DRIVERS

ROUND SHANK SERIES

This series has round shanks and the 2½" to 12" blades have a forged bolster which prevents forcing the blade into the handle. The bolster on the 8" and 12" sizes is hexagon shaped . . . a wrench can be applied to give extreme leverage. Tips are precision cross ground.

| Stock No. | Blade Tip Width | Blade Length | Blade Dia. | Overall Length |
|-----------|-----------------|--------------|------------|----------------|
| SD-1 | 1/4" | 1 1/2" | 1/4" | 3 1/2" |
| SD-2 | 3/8" | 2 1/2" | 3/8" | 6" |
| SD-4 | 1/2" | 4" | 1/2" | 7 1/2" |
| SD-6 | 5/8" | 6" | 5/8" | 10 1/2" |
| SD-8 | 7/8" | 8" | 7/8" | 12 1/2" |
| SD-12 | 1 1/8" | 12" | 1 1/8" | 17 1/2" |

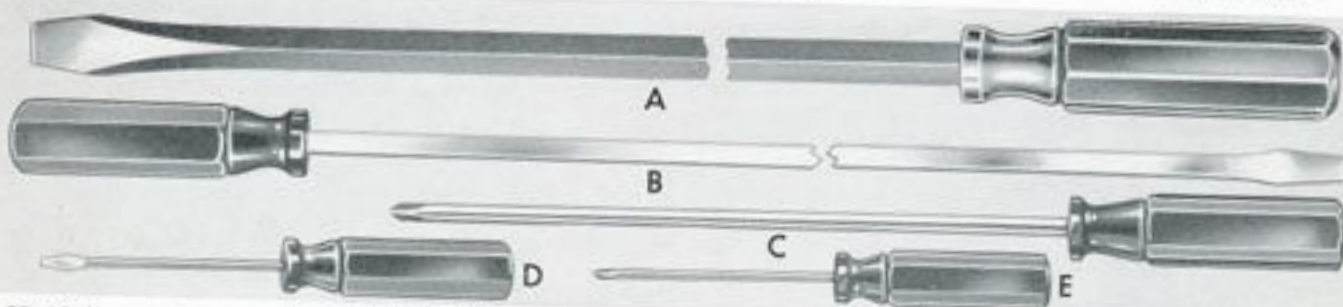
SDS-60 Standard Screw Driver Set. One each of above 6 screw drivers.

SQUARE SHANK SERIES

Many industrial users prefer square bladed screw drivers . . . the square stock adds to the twisting strength and when tight screws are turned a wrench can be applied to give additional leverage. These drivers have precision cross ground tips and are highest quality throughout.

| Stock No. | Blade Tip Width | Blade Length | Blade Stock | Overall Length |
|-----------|-----------------|--------------|-------------|----------------|
| SD-42 | 3/8" | 2 1/2" | 3/8" | 5 1/2" |
| SD-44 | 1/2" | 4" | 1/2" | 7 1/2" |
| SD-46 | 5/8" | 6" | 5/8" | 10 1/2" |
| SD-48 | 7/8" | 8" | 7/8" | 12 1/2" |
| SD-412 | 1 1/8" | 12" | 1 1/8" | 17 1/2" |

SDA-50 Standard Screw Driver Set. One each of above 5 screw drivers.



A SD-18 Heavy Duty Screw Driver. A powerful 18" blade screw driver . . . especially useful in industrial use for screw heads of 3/4" diameter and larger. The alloy steel blade has a 3/8" wide tip and is made of 1 1/2" square stock which can be turned with a wrench to move tight screws. The large "Octo-Grip" plastic handle gives plenty of leverage and is shock-proof.

B ★SD-2385 Extra Long Screw Driver. Slender 22" blade that gets to those hard-to-reach screws. Blade is 1/4" square stock, it is made from finest alloy steel and heat treated to give resilience to the shaft and hardness and toughness to the tip. Tip is cross ground to give the best fit and grip in the screw slot. Tip size is 3/16" x 1/32". Overall length of this screw driver is 25 1/2".

C ★SDP-1025 Long Phillips Screw Driver. A No. 2 Phillips bit on a 9 1/2" long blade. This is over twice the length that most No. 2 bit drivers provide and reaches into deep recesses. Superior alloy steel round blade is 1/4" diameter. Overall length is 13 1/2". "Octo-Grip" plastic handle is shock-proof.

D SD-234 Short Screw Driver. 3" long blade made of 3/16" diameter round stock with standard type tip 1/4" wide. "Octo-Grip" black plastic handle is shock-proof.

E ★SDP-3195 Thin Phillips Screw Driver. No. 1 Phillips bit on a 3 1/4" long blade securely anchored in a black "Octo-Grip" shock-proof handle. The blade is round and is 3/16" in diameter.



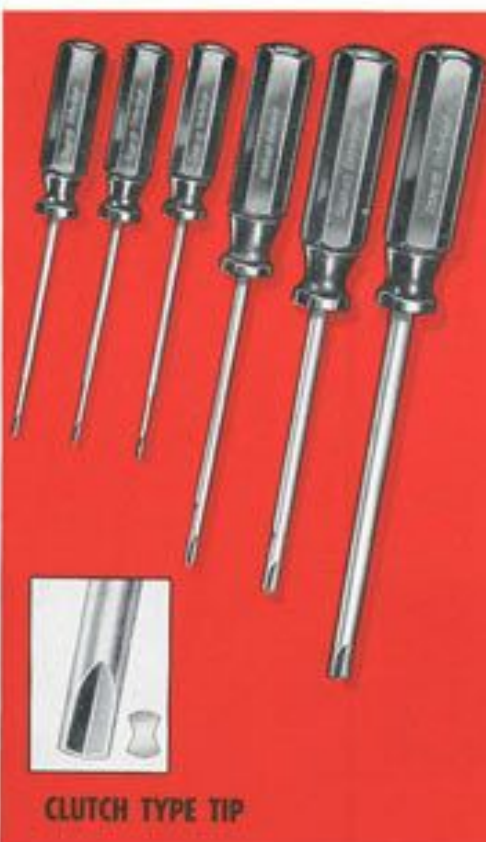
PHILLIPS TIP

"OCTO-GRIP" PHILLIPS DRIVERS

This is our finest line of Phillips screw drivers. They are built with superior alloy steel blades specially heat treated to give the wear resisting qualities needed for turning self-tapping screws. The blades are chrome plated. Avoid damage to bits and screws by using the proper size bit and by cleaning dirt out of the screw recess.

| Stock No. | Phillips Bit | Blade Length | Blade Diameter | Overall Length |
|-----------|--------------|--------------|----------------|----------------|
| ★SDP-21S | #1 | 1" | 3/16" | 23 1/2" |
| ★SDP-22S | #2 | 1 1/2" | 1/4" | 31 1/2" |
| ★SDP-31S | #1 | 3" | 3/16" | 51 1/2" |
| ★SDP-42S | #2 | 4" | 1/4" | 71 1/2" |
| ★SDP-63S | #3 | 6" | 3/8" | 101 1/2" |
| ★SDP-64S | #4 | 6" | 7/8" | 101 1/2" |

★SDP-60S Phillips Screw Driver Set, one each of above screw drivers.



CLUTCH TYPE TIP

"OCTO-GRIP" CLUTCH DRIVERS

Top grade quality screw drivers for turning screws of the clutch-bit type. These screws are also commonly referred to as figure-8 or butterfly screws. Blades are high grade alloy steel and the bit ends are machined to close tolerances to fit accurately in the screw head recess. Careful heat treatment gives these tips exceptional strength.

| Stock No. | Blade Tip | Blade Length | Blade Diameter | Overall Length |
|-----------|-----------|--------------|----------------|----------------|
| ★SDC-4 | 1 1/2" | 4" | 3/16" | 67 1/2" |
| ★SDC-5 | 1 1/2" | 4" | 1/4" | 67 1/2" |
| ★SDC-6 | 1 1/2" | 4" | 1/4" | 71 1/2" |
| ★SDC-8 | 1 1/2" | 5" | 3/8" | 81 1/2" |
| ★SDC-10 | 1 1/2" | 5" | 3/8" | 91 1/2" |
| ★SDC-13 | 1 1/2" | 6" | 7/8" | 101 1/2" |

★SDC-60 Clutch-type Screw Driver Set. One each of above screw drivers.



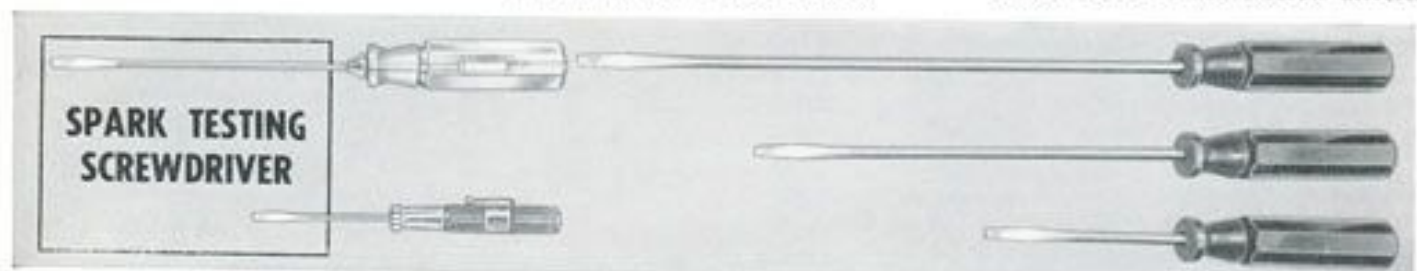
REED & PRINCE

"OCTO-GRIP" R. & P. DRIVERS

Among the various types of recessed head screws now in common use throughout industry is the Reed and Prince cross-slot screw. This type of screw should not be confused with the Phillips screw for there is a great difference in the slots. Compare them closely and you will see that each requires a special and different type of screw driver. Blades are high grade alloy steel, carefully machined and heat treated.

| Stock No. | Blade Tip | Blade Length | Blade Diameter | Overall Length |
|-----------|-----------|--------------|----------------|----------------|
| ★SDR-1 | 1 1/2" | 11 1/2" | 1/4" | 31 1/2" |
| ★SDR-3 | 1 1/2" | 21 1/2" | 3/8" | 51 1/2" |
| ★SDR-4 | 1 1/2" | 4" | 1/4" | 71 1/2" |
| ★SDR-6 | 1 1/2" | 6" | 3/8" | 101 1/2" |
| ★SDR-8 | 1 1/2" | 8" | 7/8" | 121 1/2" |

★SDR-50 Reed and Prince Screw Driver Set. One each of above screw drivers.



"OCTO-GRIP" SPARK TEST SCREW DRIVERS

The neon tube fitted into handle tells condition of plug by type of flash. Brilliant flash means good condition—a thin flash indicates too narrow a gap—no flash means a short. Slender blades and shock-proof handles make these excellent for electrical work.

★SD-145 Spark Testing Screw Driver. 5 1/2" blade.
★1015 Spark Testing Screw Driver. 2 1/4" blade. This tool is fitted with a convenient pocket clip.

Neon Tubes for Spark Testing Screw Drivers.
★NT-2 Replacement tube for above. When replacing tube, save the original springs in handle, as none are included with tubes.

"OCTO-GRIP" CABINET SCREW DRIVERS

The long, thin blades are made from a special high test alloy steel, carefully heat treated to give them tough working tips and strong resilient shanks. These screw drivers can be used on jobs where there is little clearance and where a long reach is necessary to turn smaller screws. They are especially recommended for electrical and body work. The blades are 3/16" hexagon stock and the handles are SNAP-ON "Octo-Grip" black plastic.

SD-143 Cabinet Screw Driver. 3" Blade.
SD-146 Cabinet Screw Driver. 6" Blade.
SD-1410 Cabinet Screw Driver. 10" Blade.
CDS-30 Cabinet Screw Driver Set. One each of above drivers.

Snap-on

"PAR-V" SCREW DRIVERS

Fine Quality . . . At Low Cost

- **Shock-proof handles** . . . made of high quality transparent amber colored plastic that is shock-proof and practically unbreakable.
- **Full size handles** . . . the popular SNAP-ON "Octo-Grip" pattern which gives you a powerful turning grip without cutting into your hand.
- **Roll-proof handles** . . . The eight sided pattern with alternate sides relieved helps prevent loss of the tools . . . they stay where you put them.
- **Tough Blades** . . . of special analysis high carbon tool steel heat treated to give blade strength and tip hardness.
- **Turn-proof anchors** . . . Long crimped shank wings prevent blades from turning in the handles.



STANDARD TIP



PHILLIPS TIP

SOCKET-TYPE SCREW DRIVERS

Tool users who require socket-type screw driver bits for manual use on socket wrench handles or need special screw driving bits for use on impact wrenches or power nut runners are referred to the following pages:

Impact driver bits.....page 38
Power Phillips bits.....page 38
Manual-type bits.....pages 99, 103, 105, 109, 111

REPLACEMENT BLADES

Replacement blades are available for SNAP-ON "Octo-Grip" and "Par-V" series screw drivers. Complete listings will be found on page 8.

MISCELLANEOUS SCREW DRIVERS

A SD-11 Stubby Screw Driver. The end of the fluted plastic handle is concave and acts as a finger pivot. $\frac{1}{8}$ " blade, overall length $1\frac{1}{2}$ ".

B ★1011 Screw Driver. The 2" long blade has a magnetized tip. The plastic handle is fitted with a convenient pocket clip. $\frac{1}{8}$ " tip, length 4 $\frac{1}{2}$ ".

C No. 181½ Screw Driver. A small screw driver with fluted wood handle. Metal ferrule anchors blade. $\frac{1}{8}$ " tip, blade length $1\frac{1}{2}$ ", overall length 4 $\frac{1}{4}$ ".

D No. 153A Screw Driver. A powerful short bladed driver for larger screws. $\frac{3}{16}$ " x $\frac{1}{2}$ " blade tip, blade length $1\frac{1}{4}$ ", overall length 5 $\frac{1}{2}$ ".



MAGNETIC SCREW DRIVER SETS

SDM-40 Magnetic Screw Driver Set. Contains handle with 4" shank, bit protector, and all 4 bits listed below.

SDM-50 Magnetic Screw Driver Set. Contains handle with 5" shank, bit protector, and all 4 bits listed below.

SDM-212 Standard Bit .003" x $\frac{3}{16}$ " tip.

SDM-222 Phillips Bit, No 2 tip.

SDM-213 Standard Bit .045" x $\frac{1}{4}$ " tip.

SDM-231 Reed and Prince Bit.

Snap-on "PAR-V" SCREW DRIVERS

STANDARD TIP SERIES

Preferred by many industrial tool buyers because they provide fine quality and durability at a substantial saving. Tips are tapered, cross ground and machined to fit closely and give the greatest possible turning strength.

| Stock No. | Blade Tip Width | Blade Length | Blade Diameter | Overall Length |
|-----------|-----------------|------------------|-----------------|-------------------|
| ★RG-1 | $\frac{1}{8}$ " | $1\frac{1}{2}$ " | $\frac{1}{4}$ " | $3\frac{1}{4}$ " |
| ★RG-2 | $\frac{1}{8}$ " | $2\frac{1}{2}$ " | $\frac{1}{4}$ " | $5\frac{1}{4}$ " |
| ★RG-4 | $\frac{1}{8}$ " | 4" | $\frac{1}{4}$ " | $7\frac{1}{4}$ " |
| ★RG-6 | $\frac{1}{8}$ " | 6" | $\frac{1}{4}$ " | $10\frac{1}{4}$ " |
| ★RG-8 | $\frac{1}{8}$ " | 8" | $\frac{1}{4}$ " | $12\frac{1}{4}$ " |
| ★RG-12 | $\frac{1}{8}$ " | 12" | $\frac{1}{4}$ " | $16\frac{1}{4}$ " |

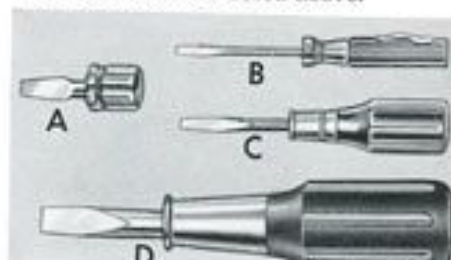
★RGS-60 "Par-V" Standard Set. All six of the screw drivers listed above.

PHILLIPS TIP SERIES

High quality alloy steel blades accurately machined to fit properly, heat treated to give long service and priced to save you money. Recommended for general purpose assembly and maintenance. For turning hardened self tapping screws we recommend our "Octo-Grip" drivers on page 67.

| Stock No. | Phillips Bit | Blade Length | Blade Diameter | Overall Length |
|-----------|--------------|------------------|-----------------|-------------------|
| ★RGP-22 | #2 | $1\frac{1}{2}$ " | $\frac{1}{4}$ " | $3\frac{1}{4}$ " |
| ★RGP-31 | #1 | 3" | $\frac{1}{4}$ " | $5\frac{1}{4}$ " |
| ★RGP-42 | #2 | 4" | $\frac{1}{4}$ " | $7\frac{1}{4}$ " |
| ★RGP-63 | #3 | 6" | $\frac{1}{4}$ " | $10\frac{1}{4}$ " |
| ★RGP-84 | #4 | 8" | $\frac{1}{4}$ " | $12\frac{1}{4}$ " |

★RGP-50 "Par-V" Phillips Set. All five of the screw drivers listed above.



A powerful Alnico magnet anchored in the hollow shaft holds the bits in the shaft, making them easy to interchange and magnetizes the bit for holding and starting steel screws. One bit remains in the magnetic shank while others are carried in the hollow handle under the metal cap. A cap slips over the end of the driver to protect the tip when not in use. Handles are of fluted shock proof plastic.



PHILLIPS TIP

PHILLIPS SCREW DRIVERS WOOD HANDLE SERIES

Here is good quality at low cost. Blades are made from best quality steel tempered to give the utmost service. Handles are selected hardwood—smoothly finished. Blades are firmly anchored and secured by heavy steel ferrule.

| Stock Number | Phillips Bit | Blade Length | Blade Diameter | Overall Length |
|--------------|--------------|-------------------|------------------|--------------------|
| ★STS-1 | #1 | 1" | $\frac{1}{8}$ " | 27 $\frac{1}{2}$ " |
| ★STS-2 | #2 | 1 $\frac{1}{2}$ " | $\frac{3}{16}$ " | 33 $\frac{1}{2}$ " |
| ★ST-3 | #1 | 3" | $\frac{3}{16}$ " | 61 $\frac{1}{2}$ " |
| ★ST-4 | #2 | 4" | $\frac{3}{16}$ " | 9" |

★STP-40 Phillips Set. All four screw drivers listed above.

DETACHABLE HEAD SCREW DRIVER SET FOR PHILLIPS AND SLOTTED SCREWS

★GA-80 Interchangeable Screw Driver Set. Here is a SNAP-ON product that is gaining in popularity—a tool that is especially useful in production work with case hardened screws—when the tool is used almost constantly—where tips are subjected to hardest use. When tip wears, no need to throw away entire screw driver—just replace the tip.

This set of 5 detachable heads and handle will service most screw driving jobs and allow you to replace broken bits at extremely low cost. Set includes No. 2 and No. 3 Phillips bits and three standard bits to fit slotted screws No. 3 and larger.



OFFSET SCREW DRIVERS STANDARD AND PHILLIPS TIPS

- A ★H-50B Hammer Head Screw Driver. Works well in tight quarters. 6" long, blades $\frac{1}{2}$ " x $\frac{1}{16}$ ".
- B ★060 Heavy Duty Offset Screw Driver. For the largest size screws, 7 $\frac{1}{2}$ " long, $\frac{1}{2}$ " stock, $\frac{23}{32}$ " x $\frac{3}{16}$ " blades.
- C ★050 Heavy Duty Offset Screw Driver. 7" long, $\frac{1}{2}$ " stock, blades $\frac{23}{32}$ " x $\frac{3}{16}$ ".
- D ★040 Offset Screw Driver. 5 $\frac{1}{2}$ " long, $\frac{3}{8}$ " stock, blades $\frac{3}{8}$ " x $\frac{3}{16}$ ".
- E ★030 Offset Screw Driver. 5" long $\frac{3}{16}$ " stock, blades $\frac{3}{16}$ " x $\frac{1}{16}$ ".
- F ★020 Offset Screw Driver. 4" long, $\frac{1}{4}$ " stock, blades $\frac{1}{4}$ " x $\frac{1}{16}$ ".
- G ★ST-034A Phillips Offset Screw Driver. 8" long. No. 3 and No. 4 bits.
- H ★ST-012A Phillips Offset Screw Driver. 6" long. No. 1 and No. 2 bits.

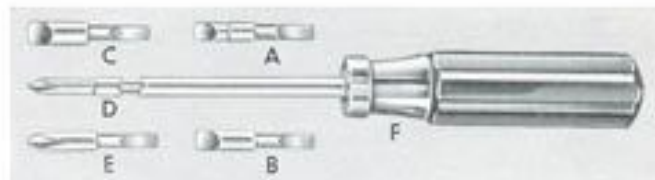


SCREW STARTERS FOR STANDARD SLOTTED SCREWS

The spring-loaded high carbon steel bit grips the walls of the screw slot so tightly that it will withstand an eight-pound pull . . . yet automatically releases when screw turning pressure reaches a certain tension. This safety feature protects the screw driver from damage—when the spring tension releases use a screw driver to tighten the screw.

There are no claws or sliding ferrules to hit against obstructions and the slender Duralumin shaft reaches into close places.

- ★GA-11 Screw Starter 2 $\frac{1}{2}$ " long
- ★GA-12 Screw Starter 5 $\frac{1}{2}$ " long
- ★GA-13 Screw Starter 9 $\frac{1}{2}$ " long
- ★SS-30 SET. One each of the 3 Screw Starters listed above.



Replacement parts for the Interchangeable Screw Driver

- A ★GA-80-30 .030" Standard Bit.
- B ★GA-80-35 .035" Standard Bit.
- C ★GA-80-40 .040" Standard Bit.
- D ★GA-80-2 No. 2 Phillips Bit.
- E ★GA-80-3 No. 3 Phillips Bit.
- F ★GA-80-1 "Octo-Grip" handle. —Not included in the set.

Use the Proper Size Driver for Phillips Screws

| Phillips Bit No. | Machine Screw Diameters | Wood Screw Diameters | Stove Bolt Diameters | Case Hardened Sheet Metal Screw Diameters |
|---------------------------------|----------------------------|----------------------|------------------------------------|---|
| Flat, Oval, and Filister Heads: | | | | Flat and Oval Heads |
| 1 | #4 and Smaller | #4 and Smaller | | #4 |
| 2 | #5 to #10 Inc. | #5 to #10 Inc. | | #5 to #10 Inc. |
| 3 | #12 to $\frac{1}{8}$ " | #10 to #16 Inc. | $\frac{1}{8}$ " to $\frac{1}{4}$ " | #12 to #14 Inc. |
| 4 | $\frac{1}{8}$ " and Larger | #18 and Larger | $\frac{1}{4}$ " to $\frac{1}{2}$ " | |

| Phillips Bit No. | Machine Screw Diameters | Wood Screw Diameters | Stove Bolt Diameters | Case Hardened Sheet Metal Screw Diameters |
|------------------|----------------------------|----------------------|-------------------------------------|---|
| Round Heads | | | | |
| 1 | #5 | #4 and Smaller | $\frac{1}{8}$ " | #4 and #5 |
| 2 | #6 to #10 Inc. | #5 to #10 Inc. | $\frac{3}{16}$ " to $\frac{1}{4}$ " | #6 to #12 Inc. |
| 3 | #12 to $\frac{1}{8}$ " | #11 to #16 Inc. | $\frac{1}{4}$ " to $\frac{1}{2}$ " | #14 |
| 4 | $\frac{1}{8}$ " and Larger | #18 and Larger | $\frac{1}{2}$ " to $\frac{1}{2}$ " | |

Blue-Point "SUPREME" CHISELS AND PUNCHES ARE



FLAT CHISELS

A Perfectly balanced. Have hand-ground cutting edges beveled at the best angle for long edge life and fast cutting on the average type of work. Can be re-edged with a file quickly when necessary.

| No. | Square Stock | Edge | Length |
|-------|--------------|--------|--------|
| S-812 | 3/8" | 1 1/2" | 3 1/2" |
| S-816 | 1/2" | 2" | 6" |
| S-820 | 5/8" | 2 1/2" | 6 1/2" |
| S-824 | 7/8" | 3" | 7" |
| S-828 | 1 1/8" | 3 1/2" | 8" |

CAPE CHISELS

| Number | Square Stock | Edge | Length |
|--------|--------------|--------|--------|
| ★ S-13 | 3/8" | 1 1/2" | 5 1/2" |
| ★ S-14 | 1/2" | 2" | 6" |

ROUND NOSE CAPE CHISEL

| Number | Square Stock | Edge | Length |
|--------|--------------|--------|--------|
| ★ S-12 | 3/8" | 1 1/2" | 6" |

DIAMOND POINT CHISELS

| Number | Square Stock | Edge | Length |
|--------|--------------|--------|--------|
| S-15 | 1/8" | 1 1/2" | 6" |
| S-19 | 3/8" | 1 1/2" | 5 1/2" |

CENTER PUNCHES

E Forged from tough steel, heat treated and tempered for hardness.

S-3C 5/16" Square Stock, 5" Length.
S-4C 7/16" Square Stock, 6" Length.

DRIFT PUNCHES

F For finishing the job of removing pins or bolts. Use a Starter Punch to loosen the pin and finish with a Drift Punch. The full length of shaft is the same diameter.

| Stock No. | Square Stock | Point | Length |
|-----------|--------------|--------|--------|
| ★ S-103 | 1/4" | 1 1/2" | 4 1/2" |
| ★ S-104 | 3/8" | 1 1/2" | 4 1/2" |
| S-106 | 1/2" | 1 1/2" | 5" |
| S-108 | 5/8" | 1 1/2" | 5 1/2" |
| S-110 | 3/4" | 1 1/2" | 5 1/2" |

STARTER PUNCHES

G When driving out pins, bolts, etc., always begin the job with a "Starter" punch. Shaft tapered from tip to handle.

| Stock No. | Square Stock | Point | Length |
|-----------|--------------|--------|--------|
| ★ S-203 | 5/16" | 1 1/2" | 5 1/2" |
| S-204 | 3/8" | 1 1/2" | 6 1/2" |
| S-206 | 1/2" | 1 1/2" | 6 1/2" |
| S-208 | 5/8" | 1 1/2" | 6 1/2" |
| S-210 | 3/4" | 1 1/2" | 6 1/2" |

PIN PUNCHES

H Pin Punches have a short drift end and then taper out. They are especially useful for driving out short pins.

| Stock No. | Square Stock | Point | Length |
|-----------|--------------|--------|--------|
| ★ S-603 | 5/16" | 1 1/2" | 5" |
| ★ S-604 | 3/8" | 1 1/2" | 5 1/2" |
| S-605 | 1/2" | 1 1/2" | 6" |
| S-606 | 5/8" | 1 1/2" | 6 1/2" |
| S-608 | 3/4" | 1 1/2" | 6 1/2" |
| S-610 | 7/8" | 1 1/2" | 7" |

LONG TAPERED PUNCHES

J These punches are invaluable for all kinds of lining up work... carefully drop forged and finished to give long, lasting service.

| Stock No. | Square Stock | Point | Length |
|-----------|--------------|--------|--------|
| S-905 | 3/8" | 1 1/2" | 8" |
| S-908 | 1/2" | 1 1/2" | 8 1/2" |
| S-910 | 5/8" | 1 1/2" | 9" |
| S-912 | 3/4" | 1 1/2" | 9 1/2" |

LONG LINING-UP PUNCH

K ★ S-714. Here is a long lining-up punch especially designed for assembly work. Center point can be used for punching holes in metal. 5/16" square stock, 5/32" point, 9 1/16" taper, 14" over-all length.



JIMMY OR PINCH BARS

L These BLUE-POINT pinch bars are hammer forged from high grade alloy steel tempered for great strength.

| No. | Stock | Edge | Length |
|------|--------|------|--------|
| 1658 | 1 1/2" | 3/4" | 10" |
| 2434 | 2" | 3/4" | 24" |

LONG PUNCHES

I For heavy duty industrial work. Highest quality.

| No. | Stock | Tip | Taper | Length |
|------|-------|------|-------|--------|
| 1210 | 3/4" | 3/8" | 4" | 12" |
| 1512 | 3/4" | 3/8" | 5" | 15" |
| 1816 | 3/4" | 1/2" | 6" | 18" |

LP-30 Set. Above 3 tools only.

LONG FLAT CHISELS

M Valuable wherever long reach is necessary.

| No. | Stock | Edge | Length |
|------|-------|------|--------|
| 1020 | 3/8" | 3/4" | 11" |
| 1024 | 1/2" | 3/4" | 12" |
| 1628 | 3/4" | 3/4" | 16" |
| 1832 | 7/8" | 3/4" | 18" |

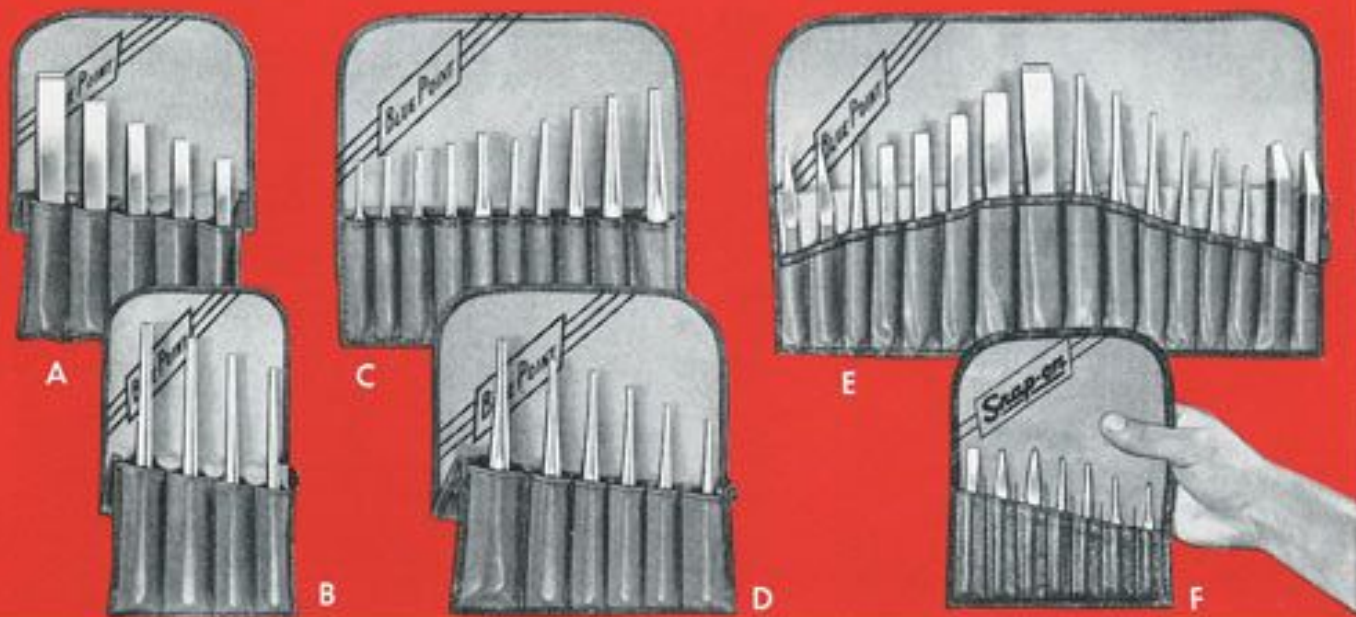
LFC-40 Set. Above 4 tools only.

RIVET BUSTER

N Use this rivet buster on rivet heads and save your chisels. This tool is especially shaped to contact at the right point and angle to shear the heads clean off.

RB-10 Rivet Buster, 10" long, 3/4" stock, 3/4" x 1/4" edge.

AMAZINGLY TOUGH, STRONG AND DURABLE



BLUE-POINT "Supreme" (Reg. U. S. Pat. off.) chisels and punches will out-cut and out-punch similar tools made from ordinary steels because the combination of metallic alloys and high carbon content in the steel we use produces qualities of amazing strength and toughness. Chisels and punches, if made too hard, will break . . . if made too soft they will flatten over. Blue-Point "Supreme" Chisels and Punches are hammer forged at low temperature to refine the

grain and preserve the carbon which gives strength and hardness to the steel. They are then tempered to give the best hardness and toughness for long service and all round work. Sanded finish square handles with full rounded corners give a firm grip and solid drive and prevent them from rolling when you lay them down. Replace old relics with a set of these high quality tools.

CHISEL AND PUNCH SETS

Flat Chisel Set

A SC-50-K Set consists of five chisels: S-812, S-816, S-820, S-824, S-828, in C-50B kit bag.

SC-50 Set, Tools only.

Long Tapered Punch Set

B SLTP-40-K Set. Consists of four punches—S-905, S-908, S-910, S-912 in C-423 kit bag.

SLTP-40 Set, Tools only.

Starter and Drift Punch Set

C SSD-100-K Set. Consists of 10 tools: five Starter Punches: S-203, S-204, S-206, S-208, S-210; five Drift Punches—S-103, S-104, S-106, S-108, S-110, in C-104B kit bag.

SSD-100 Set, Tools only.

Pin Punch Set

D SP-60-K Set consists of following six punches: S-603, S-604, S-605, S-606, S-608, S-610 complete in sturdy leatherette C-60B kit bag.

SP-60 Set, Tools only.

Chisel and Punch Set

E SCP-160-K Set. The 16 tools in this "Supreme" chisel and punch set are those usually needed for general work. Consists of five chisels, S-812, S-816, S-820, S-824, S-828; and six Pin Punches, S-603, S-604, S-605, S-606, S-608, S-610; two Diamond Point Chisels, S-13, S-19; S-13 Cape Chisel; S-12 Round Nose Chisel; S-4C Center Punch. Complete in leatherette kit bag C-160B.

SCP-160 Above Set, Tools only.

Midget Punch and Chisel Set

F SVP-70-K Set. Seven midget "Supreme" quality punches and chisels, $\frac{1}{16}$ " square stock, ideal for tiny jobs. Includes: ★SVP-402 Drift Punch $3\frac{1}{2}$ " long, $\frac{3}{16}$ " pt.; ★SVP-403 Drift Punch $3\frac{1}{2}$ " long, $\frac{1}{8}$ " pt.; ★SVP-404 Center Punch $3\frac{1}{2}$ " long; ★SVP-405 Starter Punch $3\frac{1}{2}$ " long, $\frac{1}{8}$ " pt.; ★SVP-406 Cape Chisel $3\frac{1}{2}$ " long, $\frac{3}{16}$ " edge; ★SVP-407 Round Nose Cape Chisel $4\frac{1}{2}$ " long, $\frac{1}{8}$ " wide; ★SVP-408 Flat Chisel $4\frac{1}{2}$ " long, $\frac{3}{16}$ " edge. Complete in C-72B kit bag.

CHISEL AND PUNCH HOLDER

Here's a tool which can save you many a bruised knuckle or mashed thumb and prevent chisels and punches from dropping into hard-to-reach spots. It grips any tool or other item up to 1" diameter. Simply insert the tool to be held and tighten the handle with a wrench or bar and tighten the lock nut, $4\frac{1}{2}$ " long, $\frac{1}{2}$ " head diameter, $\frac{1}{16}$ " head thickness.

CG-50 Chisel and Punch Holder.

CG-50-1 Handle and lock nut only.

CG-50-2 Head only.

GUARANTEE

Every BLUE-POINT Chisel and Punch is tested with rigid instructions to reject for the slightest visible defect of material or workmanship. We will replace any tool that, in the reasonable usage for which it was designed, proves defective in workmanship or material, provided that claim for replacement be made within thirty days from date of purchase. No replacement will be made of tools which have been ground or abused in any way.



PRY BARS

Q Rolling head exerts tremendous leverage for prying work . . . often used for prying out gears, etc. Point useful for lining-up work. Hammer forged from fine alloy steel.

650 Pry Bar, 6" long, $\frac{3}{16}$ " stock.
1250 Pry Bar, 12" long, $\frac{3}{16}$ " stock.
1650 Pry Bar, 16" long, $\frac{3}{16}$ " stock.
2050 Pry Bar, 20" long, $\frac{1}{2}$ " stock.

COTTER PIN TOOL

P ★S-6P Cotter Pin Tool. An excellent tool for spreading and removing cotter pins . . . can also be used to great advantage for inserting water pump packings, etc. Hammer forged from "Supreme" chisel steel with square bevel shank for easy handling and firm grip. Overall length 6 $\frac{1}{2}$ " $\frac{3}{16}$ " stock.

COTTER PIN PULLER

Q ★S-9094A Cotter Pin Puller. Will pull every pin no matter how tight it is. Insert hook end into cotter pin. Hit anvil end sharply, out comes pin. Hook is of tough steel pinned in place and can be replaced easily. Overall length is 10".

★S-9094A2X Hook and rivet set.

BUSHING CUTTER

R ★GA-1 Bushing Cutter. For splitting soft metal bushings in housings, steering sectors, spindles, pistons, connecting rods, etc., made from $\frac{1}{2}$ " octagon stock. $7\frac{1}{4}$ " long, $\frac{3}{16}$ " by $\frac{3}{16}$ " bit. Curved bit pushes the cut material away from the work.

Snap-on

INDUSTRIAL ROLL-CAB

Provides a Rolling Workshop for Efficient Industrial Maintenance

BENCH TOP IS REINFORCED STEEL WITH MASONITE COVERING

20 HOLDERS FOR NUTS, BOLTS, PARTS, ETC.

SPOTLITE SWIVELS TO REQUIRED POSITION

MULTIPLE SLIDES SUPPORT DRAWERS

TWO POWERFUL BENCH BRAKES

LOCK-BAR SECURES DRAWERS AND PANEL

Helps to Put More Work Minutes Into Every Maintenance Hour . . .
Conserves Available Labor and Cuts "Down-Time" to a Minimum

KR-396 Industrial "Roll Cab". Maintenance engineers throughout industry have found that the use of this rolling work shop materially increases the efficiency of their maintenance crews. Necessary tools and equipment are rolled right to the job, eliminating the need for time-consuming repeat trips to the tool crib. The work top has a masonite surface which rests on a reinforced steel base and provides a sturdy support for vises, bench grinders, etc., as well as a working surface for all types of bench work.

The sturdy light fixture is bolted to the bench top and is a heavy, rigid standard with a swivel-action heavy aluminum spot reflector . . . electric wiring is carried in flexible armor cable and plugs into an outlet at the rear of the bench.

A double outlet for light, power tools, etc., is located at both ends of the bench, providing four possible connections at one time. No lead-in to the bench is provided, but there is an electrical inlet at the rear for a main line connection.

The seven drawers, shelves, and bottom compartment provide a great amount of storage space for methodical segregation of tools, etc., and the twenty small bins at the rear can be used for a variety of small parts. The front and rear doors and the lock-bar which locks all seven drawers have tumbler type locks—all three locks work with the same key. Multiple "Non-Spill" slide runs carry the drawers easily without binding, sagging, or pulling out and spilling.

Two eight inch diameter, fixed position rubber covered wheels and two five inch swivel type rubber wheels provide easy mobility. Once rolled into the work area, two powerful jack-type bench brakes lock the "Roll-Cab" to the floor to assure a safe, steady work top.

KRM-396 "Roll-Cab". Same as the KR-396 described above but without electrical wiring and fixtures.

Specifications

Overall Dimensions: 45" long, 24" wide, 30" base to work top, 36 3/8" floor to work top.

Drawers:

Three top drawers: 15 3/8" x 7 1/8" x 1 1/2" high.

Top big drawer: 25 3/4" x 17 3/8" x 1 3/8" high.

Two center drawers: 25 3/4" x 17 3/8" x 3 3/8" high.

Bottom drawer: 25 3/4" x 17 3/8" x 4 3/8" high.

Bottom Compartment: 44 3/4" x 23 3/4" x 8 3/8" high.

Side Compartments: 23 3/4" front to back x 15" wide. Shelves can be removed.

Back Cabinet: has 20 small parts bins.

Electrical Outlets: Two at each end and one at rear of cab.

Light Fixture: Swivel head accommodates standard or reflector type bulb—bulb not included.

Electrical Inlet: At rear for line connection.

Wheels: Fixed rubber tired wheels are 8" diameter—hard rubber swivel wheels are 5" diameter.

Brakes: Two jack-type brakes assure a safe, steady work top.

Finish: Baked-on red enamel.

Weight: Net 388 lbs., shipping 510 lbs.



Snap-on SUPERCHEST AND "ROLL-CAB"

EXTRA HEAVY GAUGE STEEL-WELDED

TO GIVE LIFETIME SERVICE



THIS **Snap-on** SUPER COMBINATION HOLDS THE LARGEST TOOL ASSORTMENT

KR-361 SNAP-ON Super Combination. Here is truly the last word in a matching chest and roll-cab . . . so far ahead of any similar equipment that there is absolutely no comparison. It is designed to give you convenient, safe storage for everything from Midget tools to large pullers, drills, etc. It is ruggedly built from extra heavy gauge steel, welded and reinforced for strength and rigidity. Check its net weight of approximately 250 lbs. against any other similar equipment. In addition, it is also an impressive addition to any shop with its rich red backed-on enamel finish and chromium trim.

Snap-on SUPERCHEST

KR-61 SNAP-ON Superchest. 7 Drawers segregate your hand tools for fast, convenient selection and checking. Each drawer has Non-Spill slide runs for easy action . . . cannot pull out or tip and spill contents. Has piano-type hinges, turner-type lock, trunk-type carrying handles.

Size: 31" long, 15" wide, 17" high.

Top Compartment: divided into four sections—one fits the KTR-1 Tote Tray (see page 6).

Drawers: 3 are 8½" x 13" x 1" high.

1 is 27½" x 13" x 1" high.

2 are 27½" x 13" x 1½" high.

1 is 27½" x 13" x 3¼" high.

Shipping weight 137 lbs., net 122 lbs.

Snap-on SUPER "ROLL CAB"

KR-302 SNAP-ON Super "Roll-Cab." There's plenty of room in these large Non-Spill slide run drawers and large open compartment to store all your larger tools and equipment. The Cab rolls easily on 3" plate-type silent-rubber casters (2 swivel and 2 fixed)—even when fully loaded. Large chromium plated door handles have turner type lock. Doors have full length piano-type hinges.

Cab Size: 31" high, 33" long, 17" wide.

Drawers: 2 are 16" x 12" x 2½" high.

1 is 16" x 24½" x 4¼" high.

1 is 16" x 24½" x 6¼" high.

Compartment: is 16½" x 33" x 11" high.

Shipping weight 153 lbs., net 122 lbs.

Drawers slide easily on full length slide-runs. They will not sag or pull out accidentally even when heavily loaded with tools.

Note how close the spot welds are on a Snap-on chest or cab . . . only 5/16" to 3/8" apart. Extra welds mean extra dollars worth of wear for you.

Whenever it will add strength or rigidity, edges are double rolled. This more costly construction adds years of satisfactory use.

Round corners and edges are smoothed with file and emery cloth before the rich red enamel finish is applied to the metal.

Sensible trunk type carrying handles. Strong enough to lift the heaviest chest load . . . big enough to hold without pinching or cutting fingers.

Full length piano-type hinges are used on doors and lids to provide greater strength and finest appearance.

A steel channel panel welded inside the lid adds rigidity and structural strength . . . prevents warping the lid or the hinge.

Drawer runners are attached to extra steel plates welded into the chest and cab. This construction adds to the strength and rigidity of the unit.

A folding brace at each end of the chest holds the lid in open position.

Space dividers also serve as reinforcing braces. Welded to bottom and sides of drawer they prevent sagging or buckling.

Snap-on WELDED STEEL COASTER-CAB WITH LOWER DRAWER SECTION AS OPTIONAL EQUIPMENT



KR-377A
COASTER
CAB

COASTER-CAB
WITH KR-437
DRAWER SECTION

Modern! Convenient! Practical!
Rolls Right to the Job—No Lost Time—No Hunting for Tools

KR-377A Snap-on "COASTER-CAB"

Modernize your maintenance shop with roller cab convenience and speed repair work by taking the bench to the job. Here is plenty of storage room for all your tools from Midget tools to large drills, gear pullers, and other equipment... built into a rolling work bench. It is ruggedly built of heavy gauge steel and electrically welded for greatest strength and rigidity.

A "drop-in" front panel encloses the lower compartment and slides into a rack under the lower drawers. One padlock locks the entire contents. Heavy gauge, flat metal top provides plenty of working space. Oversize casters (2 swivel, 2 fixed) roll your "Coaster-Cab" easily and quietly to the job. The attractive red enamel finish is oven baked at high temperature so the cabinet will keep that new, glossy finish indefinitely.

Four Sturdy, Roomy Drawers

Plenty of space for wrenches and hand tools—even long sliding bars, extensions, etc. Each drawer has "Non-spill" slide runs, and the large bottom drawer has double sets of runs. Even when heavily loaded these drawers will slide easily and without sagging, binding, tipping, or pulling out completely and spilling.

Specifications

Overall dimensions: 26½" long, 18½" wide, 36" high.
Two top drawers: 20½" long, 16½" wide and 2" high.
One drawer is 20½" long, 16½" wide and 3" high.
One drawer is 20½" long, 16½" wide and 4½" high.
Compartment is 26½" long, 18½" wide and 16" high.
Net Weight: 144 lbs., Shpg. Wt. 153 lbs.

KR-437 OPTIONAL 3-DRAWER SECTION

We can now supply this three drawer section which fits both the welded "Coaster Cab" illustrated and previous bolted models and is quickly installed by bolting into existing bolt holes. The section consists of three drawers, two false sides, and a top panel. Note: the optional 3-drawer section is packed as a separate unit and is not installed into the Cab at the factory.

Specifications

Top Drawer: 20½" x 16½" x 3".
Two Lower Drawers: 20½" x 16½" x 4½".
Net Weight: 55 lbs., Shpg. Wt. 59 lbs.



Snap-on GABLE-ROOF MECHANIKIT It's Big and Ruggedly Built — Has Slide Run Drawers

KRD-21 "Mechanikit". Offers many features which have made it the choice of thousands of professional industrial mechanics. The generous overall size—21" long, 8½" wide and 11½" high provides ample storage space for the average kit of tools and wrenches. The lid has full length piano-type hinge and is gable shaped to give maximum tool space and provides the needed height for the handle of the KTRD-1 Tote-Tray which fits snugly in the top compartment. The tray is furnished with the KRD-21 "Mechanikit" at no extra cost.

Top drawer is 19½" long, 7½" wide and 1½" high with four compartments for small tools. Bottom drawer is 19½" by 7½" and 3" high and has a sliding tray for very small tools and parts. Each drawer is fitted with "non-spill" slide runs which permit drawers to open without sagging or falling out. Drawers glide easily even when fully loaded.

Heavy gauge steel is electrically welded for rigidity and strength. When opened, the piano-hinged front drops down out of the way of the drawers. When closed the front secures to top with snap fasteners. Has a strong padlock hasp and a sturdy leather suitcase type handle. Finished in baked-on red enamel.



Snap-on ROLLA-BENCH

TAKES TOOLS AND WORK BENCH RIGHT TO THE JOB



ROLLA-BENCH WITH
KR-431 LOWER DRAWER
SECTION INSTALLED

KR-300B
STANDARD MODEL



DESIGN
PATENT NO.
126,215

This roll front is constructed of interlocking steel panels, and it slides out of sight along full length channels that prevent binding and assure free movement. It is an especially handy feature where limited space would make open panel type doors an inconvenience. A tumbler type lock shown at right serves the roll front.

A Portable Work Bench and a Roomy Tool and Equipment Cabinet in One Unit

Enjoy all the advantages of a portable work bench, adequate tool storage space and the conveniences of a fine tool cabinet. Here you have ample facilities for the orderly arrangement of your wrenches and hand tools and storage space for electric drills, impact wrench, or other bulky equipment.

The masonite covered top has a reinforced steel base and is ruggedly built to afford a sturdy stand for a vise, bench grinder, etc. A double-electrical outlet for connecting electrical equipment and a 3-wire cable for connecting to the power line and grounding is located at the back of the bench . . . see picture at right. All drawers are fitted with "non-spill" slide runs—they glide in and out

easily even when loaded—they have a fixed stop which prevents them from pulling out completely and spilling the contents, and they will not tip and bind when open.

The "Rolla-Bench" rolls easily on large hard rubber casters, two of which have locks to hold the bench steady during use . . . see picture at right. The lighting fixture is sturdily constructed and has a flexible top to permit turning the light where needed . . . wiring runs from the base of the stand and plugs into one of the rear receptacles. The entire bench is heavy gauge steel construction, electrically welded for greatest strength and long service and is finished in baked-on enamel with chromium trim.

Models Available

KR-300B Standard "Rolla-Bench". With light fixture and electric wiring as described above . . . baked-on red enamel finish.
KRH-300B Special Red "Rolla-Bench". Without light and wiring . . . baked-on red enamel finish.
KGH-300B Special Grey "Rolla-Bench". Without light and wiring . . . baked-on grey enamel finish.
KWH-300B Special White "Rolla-Bench". Without light and wiring . . . baked-on white enamel finish. This model has become very popular for use in hospital orthopedic wards.

Lower Drawer Section for "Rolla-Bench"

This sectional set of three drawers is available for users who prefer more drawer space rather than the open compartment. The set includes two false sides which bolt into existing holes in any model "Rolla-Bench" and are easily installed. Note: The drawer set is packed separately and is not installed into the bench at the factory.

"Rolla-Bench" Specifications

Overall dimensions: 34" long, 18" wide, 36" high.
Three small drawers: 8½" wide, 12½" long, 1 11/16" high.
Top long drawer: 26½" long, 12½" wide, 1 11/16" high.
Two bottom long drawers: 26½" long, 12½" wide, and 3 13/16" high.
Open compartment: 34" long, 17" wide, 13½" high.
Net weight: 165 lbs., shipping wgt. 194 lbs.

Models Available

KR-431 Red enameled 3-drawer section.
KG-431 Grey enameled 3-drawer section.
KW-431 White enameled 3-drawer section.

Specifications

Top Drawer: 26½" x 12½" x 1½".
Two Lower Drawers: 26½" x 12½" x 3¼".
Net Weight: 40 lbs., shpg. wt. 45 lbs.



Snap-on TRIPLE-UNIT TOOL CABINET

USE THE THREE UNITS SEPARATELY OR IN COMBINATION



A



B



C



FULL LENGTH DRAWERS



SLIDE-RUN DRAWERS



REINFORCED LID



PIANO-TYPE HINGES



TUBE-TYPE CORNERS



TUMBLER TYPE LOCK

DESIGNED TO GROW WITH YOUR NEEDS

Start with the unit that fits present needs and add a unit as your tool equipment grows. Here is quality construction and material that will last indefinitely. Extra heavy gauge steel is used throughout and electric welded construction with reinforced tops and sides assures rigid non-warping units and drawers. Drawers in all three units are easy gliding slide-run—can't sag, bind or pull out and spill tools. High grade tumbler locks on each unit protect your tool investment. All units finished in baked-on red enamel.

KR-56 BIG, SIX DRAWER TOOL CHEST

A KR-56 Tool Chest. Full length piano-type hinges which connect the lid and the front panel to the chest add rigid strength and good appearance. Front panel lifts up out of the way and two folding brackets hold the lid open. Strong trunk handles make carrying easy. Top compartment will hold the KTR-1 Tote-Tray listed below (not included with chest).

SPECIFICATIONS

Overall Dimensions: 26" long, 12" wide, 14" high.
Top Compartment: 3 1/2" deep—divided into 3 sections, 20 1/2" x 8 1/2", 25 1/2" x 3 1/2" and 8 1/2" x 5".
Drawers: 3 are 10 1/2" x 7 1/2" x 1" high—3 are 24" x 10 1/2", and are 1", 1 1/2" and 3 1/2" high respectively.
Shipping weight 80 lbs., net 63 lbs.

KR-420 TWO-DRAWER SECTION

B KR-420 Two-Drawer Section. Can be placed on the top of roll-cab or bench as a base for above chest, or two or more sections can be stacked together. Corner guides keep the chest or other sections in place. Each drawer has tumbler lock.

SPECIFICATIONS

Overall Dimensions: 26" x 12" x 8" high.
Drawers: Each are 23 1/2" x 11 1/2" x 3" high.
Shipping weight: 35 lbs., net 31 lbs.

EASY MOVING "ROLL-CAB"

C KR-352 Roll-Cab. Roomy drawers automatically lock when lower compartment panel is closed and locked. When opened the panel slides in under the drawers. Two of the 3" casters swivel for easy steering.

SPECIFICATIONS

Overall Dimensions: 26 1/2" x 18" x 30" high.
Drawers: All are 21 1/2" x 16 1/2" x 4" high.
Compartment: 26" x 17 1/2" x 9 1/2" high.
Shipping weight 113 lbs., net 98 lbs.

KR-357A Roll-Cab Combination. A two unit combination of KR-352 "Roll-Cab" and KR-56 Tool Chest.

KR-358A Three-unit Combination. Three unit combination of KR-56 Chest, KR-420 Section and KR-352 "Roll-Cab".



TOTE TRAY

KTR-1 Tote Tray. Fits the top compartment of the chest shown above. Has socket compartment. Tray size is 20 1/2" x 8" x 3 1/2" high. Baked-on red enamel finish. 1 1/4 lbs. net weight.



SKID TRAY FOR KR-56 CHEST

KR-456 Skid Tray. Bolts onto the KR-56 Chest. Two steel runners take the wear when skidding the loaded chest over floors, on or off trucks, etc. 10 1/2 lbs. net weight.

Snap-on ALL STEEL MECHANICHESTS

With Locking Front Panels—Big Sturdy Drawers



HEAVY GAUGE STEEL



TRUNK TYPE HANDLES



SLIDE-RUN DRAWERS

KR-53 "MECHANICHEST"

A KR-53 "Mechanichest". One of our best tool chests...it's big and electrically welded from heavy gauge steel to give strength and rigid construction. The front panel which has a tumbler lock covers the drawers to protect the contents, and swings up out of the way when the lid is lifted. Lid and panel have full length piano-type hinges which add to the strength and appearance, and lid has two folding brackets to hold it open. Welded reinforcing channels on the inside of the lid and panel add rigidity and strength.

Drawers have non-spill slides—they glide open easily when loaded but cannot sag, bind or pull out. The top compartment is partitioned into three sections, the largest of which fits the KTR-2 Tote-tray listed below. Note: this tray is not included with the chest. Big trunk-type side handles give portability and the chest has baked-on red enamel finish.

SPECIFICATIONS

Overall Dimensions: 24 1/4" long, 10 1/2" wide, 11 1/2" high.
Top Compartment: 13 1/2" deep—divided into 3 sections, 23 1/8" x 2 1/4", 19 1/2" x 7 1/8", 7 1/8" x 4 1/4".
Top Drawer: 21 1/2" x 8 1/2" x 1 1/2", divided into 4 sections.
Middle Drawer: 21 1/2" x 8 1/2" x 2", divided into 2 sections.
Bottom Drawer: 21 1/2" x 8 1/2" x 3 1/2", no divisions.
Net Weight: 39 lbs., shipping weight 43 1/2 lbs.

KR-23 "MECHANICHEST"

B KR-23 "Mechanichest". A fine chest of the same high quality as the one above but slightly smaller. It is built of heavy gauge steel, electrically welded to give rigid, rugged durability. The easy riding drawers have non-spill slides and cannot sag, bind or pull out. Lid and front panel are fastened to the chest with full length piano-type hinges and have a large padlock hasp. The KTR-2 Tote-tray listed below will fit into the top compartment but is not included with the chest. Large trunk-type handles are provided and the entire chest has baked-on red enamel finish.

SPECIFICATIONS

Overall Dimensions: 24 1/4" long, 8 1/2" wide, 11 1/2" high.
Top Compartment: 24" x 8" x 2 15/16", no divisions.
Top Drawer: 21 1/2" x 7 1/4" x 1 1/2", divided into 4 sections.
Middle Drawer: 21 1/2" x 7 1/4" x 2", no divisions.
Bottom Drawer: 21 1/2" x 7 1/4" x 3 1/2", no divisions.
Net Weight: 32 lbs., shipping weight 36 1/2 lbs.

TOOL TOTE TRAY

C KTR-2 Tote Tray. Partitioned to segregate sockets from other tools. Size 19" long, 7" wide, and 2 3/8" high. Red enamel finish. This tray will fit into the top compartments of the "Mechanichests" shown and listed above.

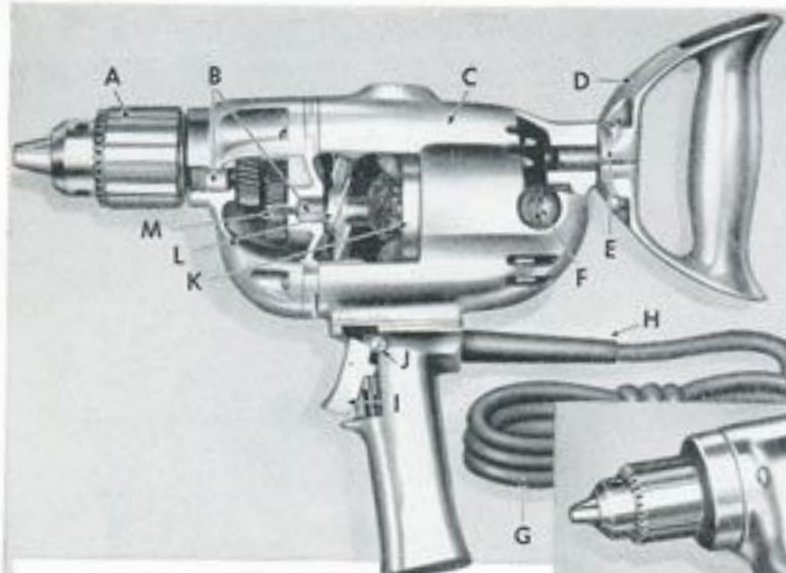
MIDGET TOOL CHEST

D KR-65B Midget Tool Chest. No drawers to pull out—no trays to lift out...top section moves back on slide channels. Compartments segregate the contents...bigger tools, such as punches, chisels, screw drivers, wrench handles, fit into the bottom sections.

Sturdily Constructed—Convenient to Carry

Overall size is 11 1/4" long, 7 3/8" wide, and 3 1/2" high. Made of heavy gauge steel—electrically welded throughout. Two sturdy hinges and a tumbler lock secure the contents, and a metal handle is welded to the cover. The chest is finished in baked-on red enamel.





11 BIG FEATURES

MAKE

Blue-Point*

ELECTRIC DRILLS

THE BEST TO OWN AND USE

A 3-Jaw Geared Chucks used on BLUE POINT drills are heavier than those used on most drills . . . your assurance of long service life. Threads on the spindle shaft are precision ground to fit perfectly and insure minimum chuck runout.

B Ball Bearing Construction. BLUE POINT drills are 100% ball bearing equipped except models ED-10, ED-64, ED-76, and ED-89. These four models have ball bearings plus a bronze bearing after the intermediate gear. Ball bearings are permanently lubricated and sealed from dust and grit.

C Cost Aluminum Housing. Gives great strength with light weight . . . well rounded corners make them comfortable to operate. Removable pipe handle is furnished on the larger models.

D Spade Type Swivel Handle on the larger models is easily adjustable to any position or removed entirely for use in drill stands. One screw mounted in the pinch type band **E** makes this speedy adjustability possible.

F Cartridge Type Brush Holders flush with the case are easily accessible and removable to facilitate brush inspection or replacement.

G Heavy Duty Cable is 3-conductor type with unbreakable plug. Rubber covered and treated to resist oil, grease and wear.

H Cable Strain Reliever is provided by a thick molded taper on the cable which prevents the cable from kinking and breaking where it enters the handle.

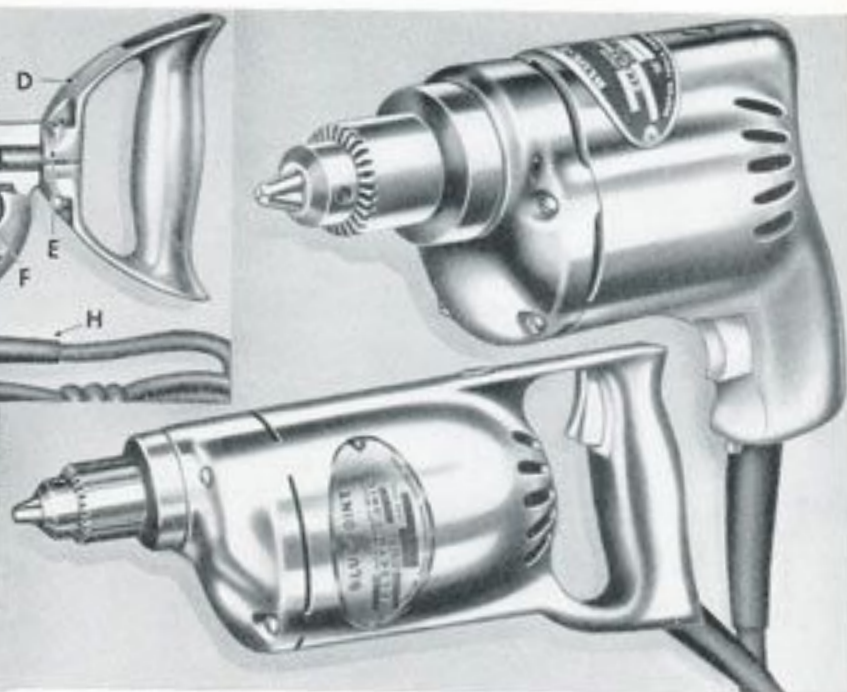
I Convenient Trigger Type Switch, two-pole type, is incorporated in the pistol grip handle of all models for greatest operating ease. A switch lock **J** with quick release is also provided.

K Extra Powerful Motor. The universal 115-volt AC-DC motor in each BLUE-POINT Drill is heavier and more powerful than motors in competitive drills of equal capacity. This extra power means greater starting torque plus added stamina for rugged work.

L Superior Cooling Features. The construction of BLUE-POINT drills and an extremely efficient fan make them cool running. The fan sucks in cool air through the rear ventilating ports, around the motor and out of the front ports away from the operator. Chips and dirt are blown away from the drill.

M Helical Gears Throughout are machined of chrome molybdenum steel, helical cut for greater tooth contact and smoother operation, carefully heat-treated to give maximum service.

*Trade-Mark of Snap-on Tools Corporation



Models ED-26A, ED-32, ED-38.

At Top—Model ED-22

Blue-Point ELECTRIC DRILLS

MIDGET 1/4" ELECTRIC DRILL

Model ED-22. Packs a lot of power and punch, yet is so small, only 8 1/2" long, that you can bring drilling speed and power into the closet places. A favorite with men and women doing assembly work requiring fast, accurate drilling operations. Has lock button for continuous operation. Equipped with 1/4" capacity geared chuck, key and 7 1/2 feet of 3-conductor cable and plug.

HEAVY DUTY 1/4" CAPACITY DRILL

Model ED-26A. A sturdy, powerful drill for constant heavy duty work. Equipped with 1/4" capacity geared chuck, chuck key and 7 1/2 feet of 3-conductor cable and plug. Specifications are given in the table below.

HEAVY DUTY 5/16" CAPACITY DRILL

Model ED-32. A full powered drill for all purpose production use and a favorite for plant maintenance and repair work. Equipped with 5/16" capacity geared chuck, chuck key and 7 1/2 feet of 3-conductor cable and plug. See table below for the specifications of this drill.

STANDARD 3/8" CAPACITY DRILL

Model ED-38. This general purpose drill combines the power factor and extra chuck capacity for larger, heavier work with the light weight, and design of smaller drills. Equipped with 3/8" capacity geared chuck, chuck key and 7 1/2 feet of 3-conductor cable and plug. See specifications below.

Specifications for Above Drills

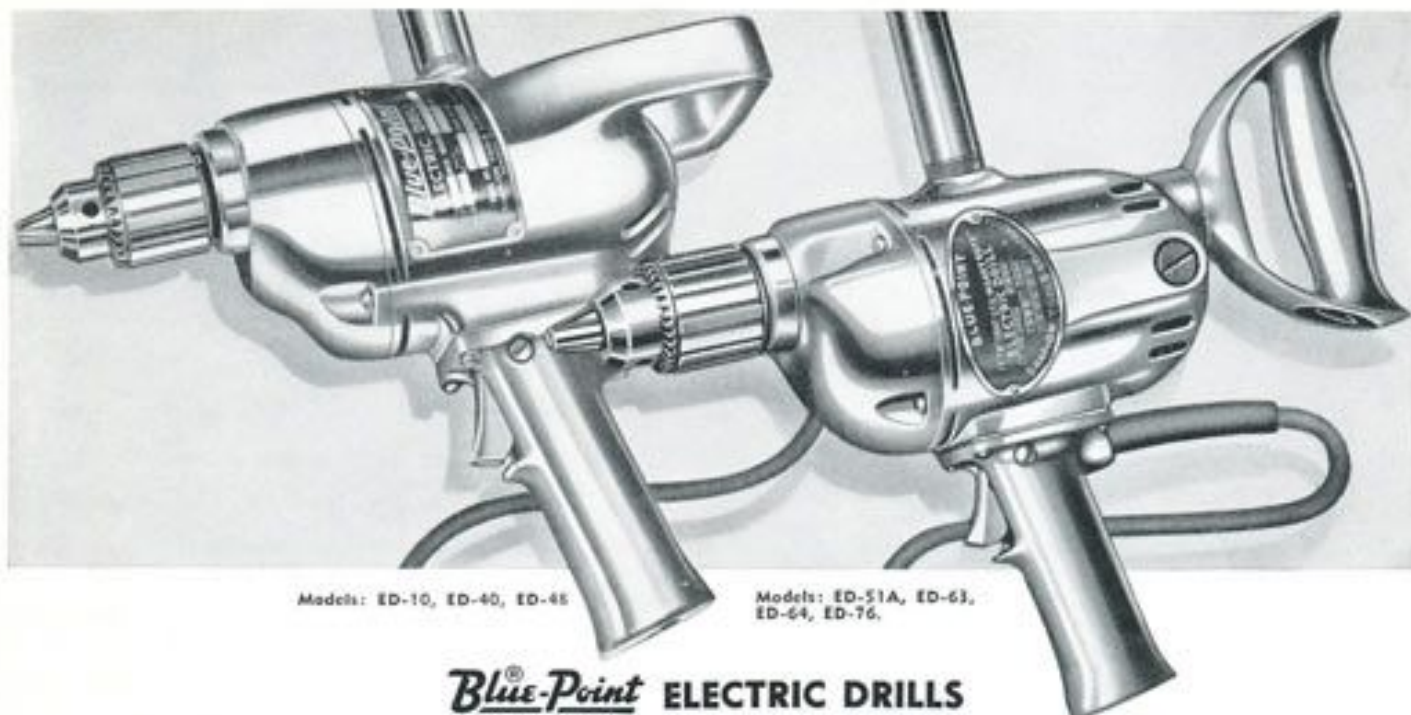
| STOCK No. | ED-22 | ED-26A | ED-32 | ED-38 |
|------------------------|---------------|---------------|-----------------|---------------|
| Geared Chuck | 7B 3/8"-24 | 7B 3/8"-24 | 30B 5/16"-24 | 2B 3/8"-24 |
| Amperes used | 2.2 | 4.5 | 5.5 | 5.5 |
| Capacity: In Steel | 1/4" | 1/4" | 5/16" | 3/8" |
| Capacity: In Hardwood | 3/8" | 3/8" | 3/8" | 1/2" |
| Speed: No Load (RPM) | 1700 | 2300 | 1800 | 800 |
| Speed: Full Load (RPM) | 1150 | 1600 | 1100 | 400 |
| Net Weight (lbs.) | 3 3/4 | 5 | 7 1/4 | 21 1/4 |
| Overall Length | 8 1/2" | 11" | 12 1/2" | 12 1/2" |

220 volt models available on special order.

REPLACEMENT CHUCKS AND CHUCK KEYS

Chucks are furnished complete with the keys and rubber key holders listed below:

| CHUCK No. | Chuck Capacity | Thread Size | CHUCK KEY No. | KEY HOLDER No. |
|-----------|----------------|-------------|---------------|----------------|
| SC-1A | 0-1/8" | 3/8"-24 | SCK-1 | SCH-1 |
| SC-4A | 0-1/4" | 3/8"-24 | SCK-4 | SCH-1 |
| SC-4B | 0-1/4" | 1/2"-20 | SCK-4 | SCH-1 |
| SC-3A | 0-3/8" | 3/8"-24 | SCK-5 | SCH-2 |
| SC-3B | 0-3/8" | 1/2"-20 | SCK-5 | SCH-2 |
| SC-3D | 0-3/8" | 3/8"-16 | SCK-5 | SCH-2 |
| SC-5B | 5/16"-1 1/2" | 1/2"-20 | SCK-5 | SCH-2 |
| SC-5D | 5/16"-1 1/2" | 3/8"-16 | SCK-5 | SCH-2 |
| SC-6D | 0-1 1/2" | 3/8"-16 | SCK-6 | SCH-2 |



Models: ED-10, ED-40, ED-48

Models: ED-51A, ED-63,
ED-64, ED-76

Blue-Point ELECTRIC DRILLS

HEAVY DUTY 3/8" CAPACITY DRILL

Model ED-40. A sturdy drill for parts assembly lines, maintenance departments, construction crews, etc. An all ball bearing drill . . . bearings sealed in housing to prevent entrance of grit and dirt . . . permanently lubricated. Molded rubber cable strain reliever prevents cable from kinking and breaking. Rear handle is solid with the housing . . . top pipe type handle is detachable.

Equipment includes a geared 3-jaw chuck, chuck key and 7½ feet of 3-conductor cable and plug. See table below.

GENERAL PURPOSE 1/2" CAPACITY DRILL

Model ED-10. Our lightest ½" drill but having all the power necessary for general purpose use. Horizontal back handle is cast in line with the chuck for easier handling . . . top handle is removable. Powerful motor is mounted on ball bearings sealed from dust and grit. Gears are mounted on sleeve bearings. Trigger may be locked in "on" position.

Equipment includes a ½" capacity 3-jaw geared chuck and key, and 7½ feet of 3-conductor rubber covered cable and plug. General specifications are shown below.

STANDARD 1/2" CAPACITY DRILL

Model ED-48. A light weight, compact drill that will prove most efficient for all general shop work. The horizontal back handle is cast integral with the motor housing and is in a direct line with the chuck and bit for better balance and consequently easier operation. The thread on chuck spindle is ground to provide greatest accuracy and a true running chuck. Molded rubber strain reliever prevents cable damage.

Equipment includes a ½" capacity 3-jaw geared chuck, chuck key and 7½ feet of 3-conductor rubber covered cable and plug. See table below for complete specifications.

HEAVY DUTY 1/2" CAPACITY DRILL

Model ED-51A. A constant service ½" capacity drill much in demand in railroad shops, building and other heavy industries. Detachable spade type handle on the rear, removable pipe type handle on the top. Ball bearing throughout, all bearing seats precision bored. Complete with 3-jaw geared chuck, chuck key and 15 feet of 3-conductor cable and plug. Specifications given below.

STANDARD 5/8" CAPACITY DRILL

Model ED-63. Detachable swivel spade type handle on rear and removable handle on top permits drilling with great ease and accuracy. Equipped with geared 3-jaw chuck, chuck key and 15 feet of 3-conductor cable and plug. Complete specifications are shown below.

HEAVY DUTY 5/8" CAPACITY DRILL

Model ED-64. Here is a drill you can rely on for hard continuous service in shops or on production lines. Equipped with geared 3-jaw chuck, chuck key and 15 feet of 3-conductor cable and plug. Table below gives specifications.

HEAVY DUTY 3/4" CAPACITY DRILL

Model ED-76. A powerful, large capacity drill for all heavy work in the shop or out on the job. Equipped with ¾" capacity, 3-jaw geared chuck, chuck key and 15 feet of 3-conductor cable and plug. Specifications are listed below.

HEAVY DUTY 7/8" CAPACITY DRILL

(Not Illustrated)

Model ED-89. A rugged, powerful drill that will prove extremely useful in steel fabrication, construction, railroad and other heavy machinery fields. Equipped with a No. 2 Morse taper socket for taper shank drill bits and 15 feet of 3-conductor cable and plug. See table below for specifications.

Specifications For All Drills on This Page

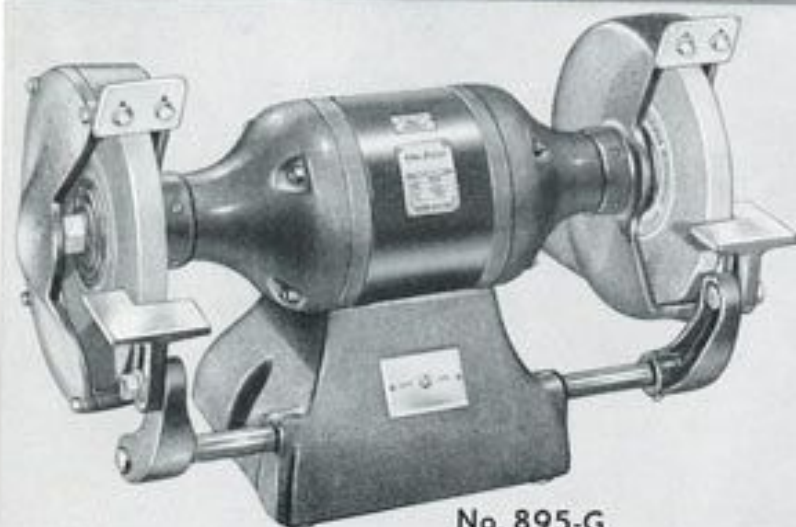
| Stock No. | ED-40 | ED-10 | ED-48 | ED-51A | ED-63 | ED-64 | ED-76 | ED-89 |
|------------------------|-------|---------|-------|---------|---------|---------|---------|---------|
| Geared Chuck | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" |
| Amperes Used | 3.5 | 4.5 | 5.5 | 4.5 | 9 | 12 | 12 | 12 |
| Capacity: In Steel | 3/8" | 1/2" | 1/2" | 1/2" | 5/8" | 5/8" | 5/8" | 5/8" |
| Capacity: In Hardwood | 3/4" | 1" | 1" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |
| Speed: No. Load (Rpm) | 900 | 450 | 500 | 550 | 500 | 450 | 425 | 400 |
| Speed: Full Load (Rpm) | 500 | 300 | 350 | 350 | 300 | 290 | 290 | 235 |
| Net Weight (lbs.) | 9 | 8 | 9 | 10 1/2 | 13 | 22 | 24 | 25 |
| Overall Length | 11" | 10 1/2" | 11" | 11 1/2" | 12 3/8" | 15 1/4" | 15 1/4" | 18 1/4" |

220 volt models available on special order.

Electric Tool Guarantee

Every SNAP-ON or BLUE-POINT electrically driven tool is thoroughly tested under load and checked for possible electrical and mechanical defects before leaving our plants. We will gladly replace without cost, any parts of a tool which we find defective in material and workmanship, provided the tool is returned to the nearest SNAP-ON branch with all transportation charges prepaid, and provided that no other repair work has been performed by others.

SNAP-ON TOOLS CORPORATION



No. 895-G

These Construction Features Guarantee Smoother, More Powerful Operation.

● **MOTOR OPERATION:** All motors are designed to operate at plus or minus 10% of stated voltage and on either 60 or 50 cycles. For example, 115 volt single phase motors operate on voltages ranging between 104-126 volts.

● **COMPLETELY ENCLOSED MOTOR:** Super powered, precision balanced motors are enclosed to prevent dirt, grit, etc., from entering motor or bearings.

● **BALL BEARING CONSTRUCTION:** Oversize labyrinth grease sealed ball bearings used throughout, assure smooth, long lived motor operation.

● **CAPACITOR START MOTOR:** (On $\frac{1}{2}$ and 1 H.P. models only.) For fast, powerful starting yet with a very low starting current . . . actually less than 15 amps. is consumed.

● **LARGE WHEEL GUARDS:** Extra wide, enclosed types on 1 H.P., $\frac{1}{2}$ H.P. and $\frac{1}{4}$ H.P. models provide the fullest possible protection and allow use of

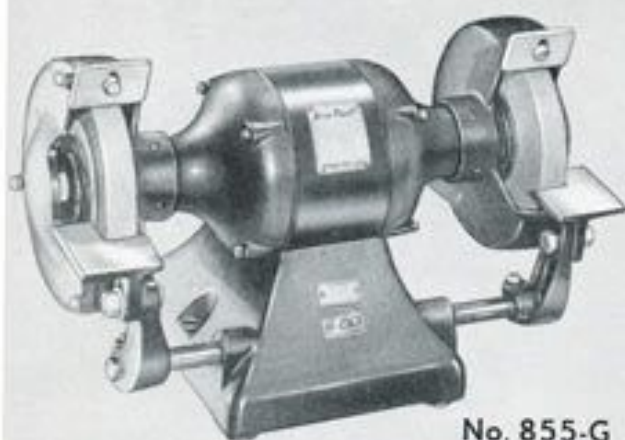
special shape wheels or wire brushes. They have a rear outlet which can be connected to industrial exhaust systems. The outer sections of the guards are quickly removed to permit changing the wheels. These guards are drilled for easy installation of eye shields shown on page 81 and are furnished with adjustable chip breakers as illustrated. Model No. 825-F $\frac{1}{4}$ H.P. has open type guards.

● **BELL TYPE CONSTRUCTION:** On all models allows grinding of long pieces.

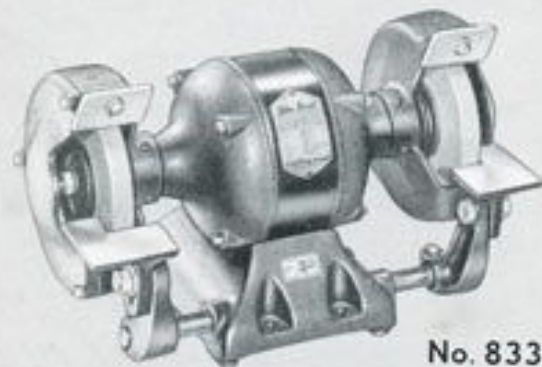
● **STURDY TOOL RESTS:** Those on 1 H.P., $\frac{1}{2}$ H.P., and $\frac{1}{4}$ H.P. models are fully adjustable for any type of work with ample take-up for wheel wear. Those on No. 825-F $\frac{1}{4}$ H.P. model only adjust to wheel wear.

● **LARGE RUGGED BASE:** Equipped with rubber feet to provide solid mounting free from vibration. Has recessed bolt openings for permanent mounting.

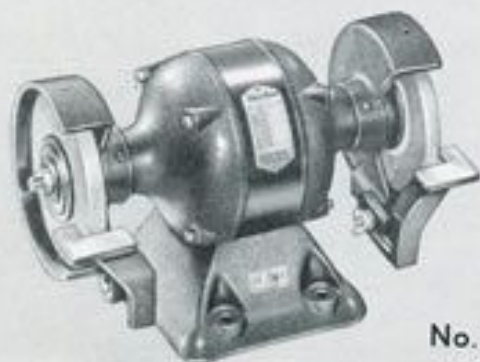
● **GROUND WIRES:** All single phase models have 3-wire cord and plug. The third wire should be screwed to the outlet box to ground the grinder.



No. 855-G



No. 833A-F



No. 825-F

STANDARD MODELS AVAILABLE

895-G Grinder, 1 H.P. Motor. 13 amp., single phase, capacitor start. Complete with two 10" diam. x 1" face wheels—one fine, one coarse and enclosed guards.

895-M Grinder, 1 H.P. Motor. Three phase 208-220/440 volt, 3.5 amps. Complete with two 10" diam. 1" face wheels—one fine, one coarse and enclosed guards. This model has leads for permanent connection . . . diagram supplied shows method of connecting to either low or high voltage line.

855-G Grinder, $\frac{1}{2}$ H.P. Motor. Single phase, capacitor start. Complete with two 7" diam. x 1" face wheels—one fine, one coarse and enclosed guards.

833A-F Grinder, $\frac{1}{2}$ H.P. Motor. Single phase, split phase start. Complete with two 6" diam. x $\frac{3}{4}$ " face wheels—one fine, one coarse and enclosed type guards.

825-F Grinder, $\frac{1}{4}$ H.P. Motor. Single phase, split phase start. Complete with two 6" diam. x $\frac{1}{2}$ " face wheels—one fine, one coarse and open wheel guards.

CAUTION: Some states have workmen's compensation laws which require the use of enclosed wheel guards.

Specifications of Standard Models

| STANDARD MODELS | No. 895-G | No. 895-M | No. 855-G | No. 833A-F | No. 825-F |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Motor Rating | 1 H.P. | 1 H.P. | $\frac{1}{2}$ H.P. | $\frac{1}{2}$ H.P. | $\frac{1}{4}$ H.P. |
| Amperes | 13 | 3.5 | 5.6 | 4.6 | 3.4 |
| Voltage | 115 | 220/440 | 115 | 115 | 115 |
| Cycle | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| No Load R.P.M. at 60 Cycles | 1740 | 1740 | 3450 | 3450 | 3450 |
| No Load R.P.M. at 50 Cycles | 1460 | 1460 | 2850 | 2850 | 2850 |
| Spindle Length | 26 $\frac{1}{2}$ " | 26 $\frac{1}{2}$ " | 19 $\frac{1}{4}$ " | 17" | 15 $\frac{1}{2}$ " |
| Height to Spindle Center | 9 $\frac{1}{2}$ " | 9 $\frac{1}{2}$ " | 8" | 6 $\frac{1}{4}$ " | 5 $\frac{1}{2}$ " |
| Total Height | 15" | 15" | 12 $\frac{1}{2}$ " | 10 $\frac{1}{4}$ " | 8 $\frac{3}{4}$ " |
| Wheel Diameter | 10" | 10" | 7" | 6" | 6" |
| Wheel Face | 1" | 1" | 1" | $\frac{3}{4}$ " | $\frac{1}{2}$ " |
| Wheel Hole | $\frac{3}{8}$ " | $\frac{3}{8}$ " | $\frac{3}{8}$ " | $\frac{1}{2}$ " | $\frac{1}{2}$ " |
| Net Weight | 135 Lbs. | 155 Lbs. | 80 Lbs. | 55 Lbs. | 39 Lbs. |



No. 1020 Extractor Set. Contains one each of all the Drill Guides, Extractors and Special Drills listed at right. Extractions can be made up to 1" below surface. Set includes case 1020-B shown above.

These tools are straight from end to end . . . when driven into a drilled hole in the broken unit, they grip without reaming or slipping, and furthermore, will not expand or distort sidewalls of holes no matter how thin or how far the tool is driven in. Tightly embedded broken threaded ends can now be drilled out to thin walled shells, safely seized with one of these tools and easily turned out. This is the only basically correct method of doing the job . . . tapered extractors often expand the broken unit making it bind tighter than it did before.

A NEW FAST WAY TO REMOVE BROKEN THREADED ENDS OF SCREWS, STUDS, PIPE AND PIPE FITTINGS



Three Steps In Extracting



1. A small hole is first drilled in the broken screw (Fig. 1); if the screw is broken below the surface the correct size guide is used to center the drill (Fig. 4).
2. The hole is enlarged to proper size to accept the extractor tool (Fig. 2 and

Fig. 5) . . . correct drill sizes are shown under "Extractors."

3. The drill is removed and the extractor is driven into the drill hole (Figures 3 and 6) and the broken end quickly turned out.

DRILL GUIDES

| No. | O.D. | I.D. | Lgth. | Use Drill |
|------|--------|--------|---------|-----------|
| 921 | 3/8" | 1/4" | 13 1/2" | 3/8" |
| 1021 | 1/2" | 3/8" | 13 1/2" | 1/2" |
| 1121 | 5/8" | 1/2" | 13 1/2" | 5/8" |
| 1221 | 3/4" | 5/8" | 13 1/2" | 3/4" |
| 1321 | 7/8" | 3/4" | 13 1/2" | 7/8" |
| 1421 | 1" | 7/8" | 13 1/2" | 1" |
| 1521 | 1 1/8" | 1" | 13 1/2" | 1 1/8" |
| 1621 | 1 1/4" | 1 1/8" | 13 1/2" | 1 1/4" |
| 1721 | 1 1/2" | 1 1/4" | 13 1/2" | 1 1/2" |
| 1821 | 1 3/4" | 1 1/2" | 13 1/2" | 1 3/4" |

SCREW EXTRACTORS

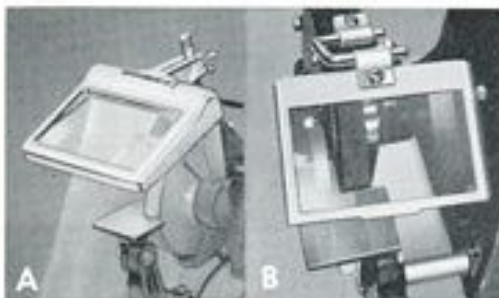
| No. | Screw Dia. | Use Drill | Flute Dia. | Lgth. |
|-----|------------|-----------|------------|--------|
| *1 | 1/4" | 1/8" | .139 | 2 1/2" |
| *2 | 3/8" | 3/16" | .205 | 2 3/4" |
| *3 | 1/2" | 1/4" | .272 | 3 1/4" |
| *4 | 5/8" | 3/8" | .338 | 3 3/8" |
| *5 | 3/4" | 1/2" | .374 | 3 3/4" |

Each extractor is equipped with a specially designed hexagon nut for convenient turning with standard wrenches.

FRACTIONAL DRILLS

| Size | Flute Length | Overall Length |
|---------|--------------|----------------|
| * 1/8" | 1 3/4" | 2 3/8" |
| * 3/16" | 2 1/4" | 3 1/2" |
| * 1/4" | 2 3/4" | 4" |
| * 5/16" | 3 1/4" | 4 1/2" |
| * 3/8" | 3 1/2" | 4 7/8" |

To prevent errors please order individual units by description as well as by tool stock number.



EYE SHIELDS

A ★S-60 Floodlight Eye Shield. Two 25 watt, 115 volt light bulbs in each shield flood work with direct light and provide visibility for safe work. Sturdy aluminum die cast frame has window opening 4" x 6" with top sheet of safety glass and bottom sheet of standard glass, easily replaced, if it becomes pitted. Easily attached to any grinder, adjustable up or down, but cannot be moved accidentally to a non-guard position. Mounting bolts included.

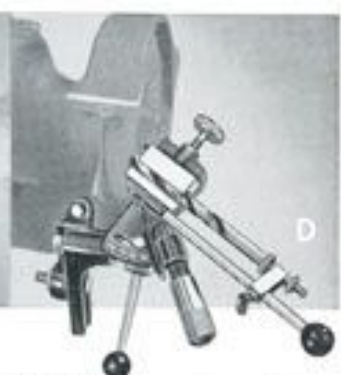
★S-60-1 Extra 25 Watt Light Bulb.

B ★S-69 Standard Eye Shield. Thick safety glass gives clear vision, with adequate protection from flying particles. Frame swivels to best working position for the job . . . easily attached to grinder.



DRILL GRINDING ATTACHMENTS

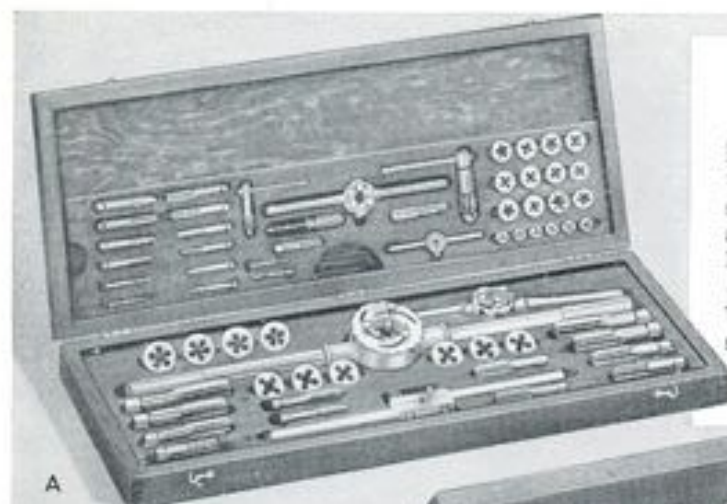
C DG-11 Drill Grinding Attachment. Accurately sharpens drills from 3/32" to 1" in diameter in a few seconds time. Adjustments for drill size and length are the only changes that have to be made for various size drills, making this tool simple to use. The drill holder is a separate unit that slides into a bracket for the actual sharpening operation, leaving the grinder free for other purposes if necessary. This bracket is bolted or screwed to the bench and will work with any type of bench grinder.



D DG-30 Drill Grinding Attachment. Sharpens drills from 3/32" to 3/4" in diameter with both lips ground identical in length, clearance and angle. Micrometer screw controls feed. Radial movement of the chuck via the swing handle controls lip clearance. The chuck trunnion is indexed for drill angles from 40° to 80°. Points 59° and 41° are noted on scale for fast adjustment of these popular cutting angles. Easily attached to any grinder and for any wheel thickness. A set-up gauge is included to assure alignment of grinder spindle and mounting bracket shaft prior to operation.

Blue-Point TAPS and DIES

★TD-9900C Complete Set—All the taps and dies needed to handle NF and NC threads in $\frac{1}{4}$ " to 1" diameters, a series of six machine screw sizes 4-36 to 12-24 and $\frac{1}{8}$ " and $\frac{1}{4}$ " pipe sizes. The set contains all the taps listed below and all dies except DR-014 and DR-019. Included are die stocks TD-3, TD-10, TD-35, TD-40 and tap wrenches TD-4, TD-20 and TD-45. The three largest die stocks are self-centering. Fitted wood case has removable tray.



A



B



C



D

★TD-2500 Machine Screw Set. A set of high quality taps and dies to handle these small machine screw threading jobs. Dies are one-piece hexagon type, adjustable from .001" to .003" under or over size. Includes taps and dies sizes 4-36, 6-32, 8-32, 10-24, 10-32 and 12-24 listed below, and the TD-4 4-Jaw Tap Wrench and TD-3 Die Stock. In fitted wood case.

★TD-2400 Standard Set. Dies are one-piece double hexagon type and can be used with a 1" socket in close quarters. This popular set contains N. F. sizes $\frac{1}{4}$ "-28, $\frac{3}{16}$ "-24, $\frac{1}{2}$ "-24, $\frac{5}{16}$ "-20, $\frac{3}{4}$ "-20; N. C. sizes $\frac{1}{4}$ "-20, $\frac{3}{16}$ "-18, $\frac{1}{2}$ "-16, $\frac{5}{16}$ "-14, $\frac{3}{4}$ "-13 and $\frac{1}{2}$ " pipe thread, together with TD-2 Tap Wrench and TD-10 self-centering Die Stock. In fitted wood case.

★TD-7800 Intermediate Set. Handles N. F. and N. C. thread sizes $\frac{1}{2}$ " to $\frac{3}{4}$ ". The dies in this set are one-piece $\frac{1}{2}$ " diameter round type. N. F. sizes are $\frac{1}{2}$ "-20, $\frac{3}{4}$ "-18, $\frac{1}{2}$ "-18, $\frac{3}{4}$ "-16. N. C. sizes are $\frac{1}{2}$ "-13, $\frac{3}{4}$ "-12, $\frac{1}{2}$ "-11, $\frac{3}{4}$ "-10. The TD-35 Self-centering Die Stock and TD-20 Tap Wrench complete the set which comes in a sturdy fitted wood case as illustrated.



BLUE-POINT Taps and Dies give you more than appearance—they give you the finest and toughest thread cutting tools you ever bought. Try them and you'll agree.

Dies $\frac{1}{4}$ " to $\frac{1}{2}$ " are one-piece, double hex type . . . a major convenience as they can be turned with a one inch socket wrench in close quarters where regular die stocks cannot be used. Machine screw dies 4-36 to 12-24 are $\frac{1}{2}$ " hexagon and dies $\frac{1}{2}$ " to 1" are one-piece circular type. Both types are adjustable to give a tight or loose fit to your thread—a small adjusting screw changes the nominal die size from .001" to .003" under or over. The three largest die stocks are self-centering and adjust to the diameter of the rod or bolt, insuring an accurate, straight thread . . . prevents dies from breakage due to tilting.

DIE STOCKS AND TAP WRENCHES

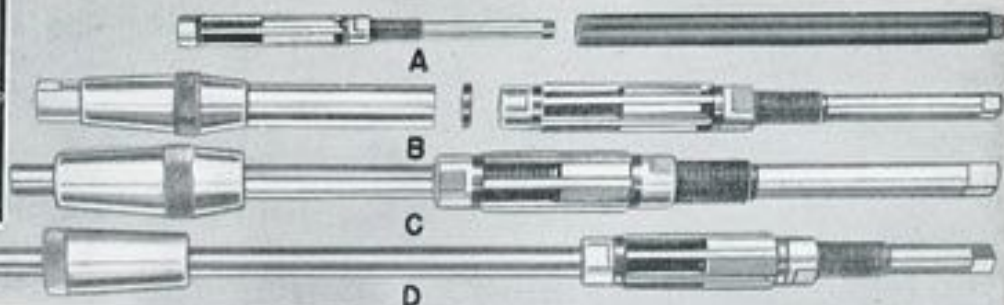
| | |
|------------------|---|
| TD-3 Die Stock | For hexagon dies 4-36 to 12-24 |
| TD-10 Die Stock | Self-centering for 1" diam. hex dies |
| TD-35 Die Stock | Self-centering for 1½" diam. round dies |
| TD-40 Die Stock | Self-centering for 2" diam. round dies |
| TD-2 Tap Wrench | Clamp-type for ½" to 1½" taps |
| TD-4 Tap Wrench | 4-jaw chuck, for 4-36 to 12-24 taps |
| TD-20 Tap Wrench | Clamp-type, for ½" to 1" taps |
| TD-45 Tap Wrench | 4-jaw chuck, for ½" to 1½" taps |
| EH-10 Tap Wrench | 4-jaw chuck, for 6-32 to 10-32 taps |
| EH-20 Tap Wrench | 4-jaw chuck, for ½" to 1½" taps |
| EH-30 Tap Wrench | 4-jaw chuck, for ½" to 1½" taps |
| EH-40 Tap Wrench | 2-jaw chuck, for ¾" to 1½" taps |
| EH-50 Tap Wrench | 2-jaw chuck, for ½" to 1½" taps |

Blue-Point TAPS AND DIES

| National Fine Sizes | | | | National Coarse Sizes | | | | Machine Screw Sizes | | | |
|---------------------|-----------|-----------|------------|-----------------------|-----------|-----------|------------|---------------------|-----------|-----------|--------------------------|
| Thread Size | TAPS | DIES | | Thread Size | TAPS | DIES | | Thread Size | TAPS | DIES | |
| | Stock No. | Stock No. | Type | | Stock No. | Stock No. | Type | | Stock No. | Stock No. | Type |
| $\frac{1}{8}$ "-28 | ★T-105 | ★D-015 | 1" Hexagon | $\frac{1}{4}$ "-20 | ★T-100 | ★D-010 | 1" Hexagon | 4-36 | ★T-111 | ★D-021 | $\frac{1}{8}$ " Hexagon |
| $\frac{3}{16}$ "-24 | ★T-106 | ★D-016 | 1" Hexagon | $\frac{3}{8}$ "-18 | ★T-101 | ★D-011 | 1" Hexagon | 6-32 | ★T-112 | ★D-022 | $\frac{3}{16}$ " Hexagon |
| $\frac{1}{2}$ "-24 | ★T-107 | ★D-017 | 1" Hexagon | $\frac{1}{2}$ "-16 | ★T-102 | ★D-012 | 1" Hexagon | 8-32 | ★T-113 | ★D-023 | $\frac{1}{2}$ " Hexagon |
| $\frac{5}{16}$ "-20 | ★T-108 | ★D-018 | 1" Hexagon | $\frac{3}{4}$ "-14 | ★T-103 | ★D-013 | 1" Hexagon | 10-24 | ★T-114 | ★D-024 | $\frac{5}{16}$ " Hexagon |
| $\frac{3}{4}$ "-20 | ★T-109 | ★D-019 | 1" Hexagon | $\frac{1}{2}$ "-13 | ★T-104 | ★D-014 | 1" Hexagon | 10-32 | ★T-115 | ★D-025 | $\frac{3}{4}$ " Hexagon |
| $\frac{1}{2}$ "-20 | | ★DR-019 | 1½" Round | $\frac{3}{4}$ "-13 | | ★DR-014 | 1½" Round | 12-24 | ★T-116 | ★D-026 | $\frac{1}{2}$ " Hexagon |
| $\frac{5}{16}$ "-18 | ★T-125 | ★DR-035 | 1½" Round | $\frac{3}{8}$ "-12 | ★T-120 | ★DR-030 | 1½" Round | Pipe Sizes | | | |
| $\frac{3}{8}$ "-18 | ★T-126 | ★DR-036 | 1½" Round | $\frac{1}{2}$ "-11 | ★T-121 | ★DR-031 | 1½" Round | | | | |
| $\frac{1}{2}$ "-16 | ★T-127 | ★DR-037 | 1½" Round | $\frac{3}{4}$ "-10 | ★T-122 | ★DR-032 | 1½" Round | $\frac{1}{8}$ " | ★T-110 | ★D-030 | 1" Hexagon |
| $\frac{5}{16}$ "-14 | ★T-128 | ★DR-042 | 2" Round | $\frac{3}{8}$ "-9 | ★T-123 | ★DR-040 | 2" Round | $\frac{1}{4}$ " | ★T-130 | ★D-040 | 1" Hexagon |
| 1"-14 | ★T-129 | ★DR-043 | 2" Round | 1"-8 | ★T-124 | ★DR-041 | 2" Round | | | | |

Note: Because of the nature of their use, taps and dies cannot be guaranteed.

Blue-Point REAMERS ADJUSTABLE TYPE



ADJUSTABLE REAMERS FOR SMALL BUSHINGS

[A] These small adjustable reamers are ideal for small bushings, etc. Carefully constructed, they are real precision tools—accurate to split thousandths. Reamers come complete with extension shanks or may be had as separate units.

| Reamer with Extension | | Reamer Only | |
|-----------------------|--------------|-------------|-----------|
| Stock No. | Size | Stock No. | Stock No. |
| ★395 | 1/8" - 3/16" | ★8A | 385 |
| ★396 | 3/16" - 1/4" | ★7A | 386 |
| ★397 | 1/4" - 5/16" | ★6A | 387 |
| ★398 | 5/16" - 3/8" | ★5A | 388 |
| ★399 | 3/8" - 7/16" | ★4A | 389 |
| ★400 | 7/16" - 1/2" | ★3A | 390 |
| ★401 | 1/2" - 5/8" | ★2A | 391 |

SHORT STYLE REAMERS AND PILOTS

[B] Critchley type adjustable reamers... short style, with pilots available to convert them for line reaming use. Retaining collars at both ends hold the blades firmly yet allow the reamer to be adjusted easily. Staggered blades are placed at the correct angle for a perfect cut. Available in a complete range of sizes from 1/32" to 3 1/16". Each pilot bushing has a short taper and a long taper.

| Reamer Number | Pilot Number | Reamer Size | Blade Length | Overall Length |
|---------------|--------------|------------------|--------------|----------------|
| ★RM-468 | RMP-468 | 1/32" - 1/16" | 2" | 5 1/4" |
| ★RM-531 | RMP-531 | 1/16" - 1/8" | 2" | 5 3/4" |
| ★RM-593 | RMP-593 | 1/8" - 3/16" | 2 1/4" | 6 1/4" |
| ★RM-656 | RMP-656 | 3/16" - 1/4" | 2 3/4" | 6 3/4" |
| ★RM-718 | RMP-718 | 1/4" - 5/16" | 2 3/4" | 7 3/4" |
| ★RM-781 | RMP-781 | 5/16" - 3/8" | 2 3/4" | 7 3/4" |
| ★RM-843 | RMP-843 | 3/8" - 7/16" | 3" | 8 3/4" |
| ★RM-937 | RMP-937 | 7/16" - 1/2" | 3" | 8 3/4" |
| ★RM-1062 | RMP-1062 | 1/2" - 5/8" | 3 1/4" | 10" |
| ★RM-1187 | RMP-1187 | 1 1/8" - 1 1/16" | 3 1/2" | 11" |
| ★RM-1343 | RMP-1343 | 1 1/4" - 1 1/2" | 4" | 12" |
| ★RM-1531 | RMP-1531 | 1 1/2" - 1 3/4" | 4" | 13" |
| ★RM-1781 | RMP-1781 | 1 3/4" - 2 1/8" | 5 1/4" | 15" |
| ★RM-2218 | RMP-2218 | 2 1/8" - 2 3/4" | 5 3/4" | 17" |
| ★RM-2750 | RMP-2750 | 2 3/4" - 3 1/16" | 6 1/4" | 19" |

ADJUSTABLE LONG STYLE PILOT REAMERS

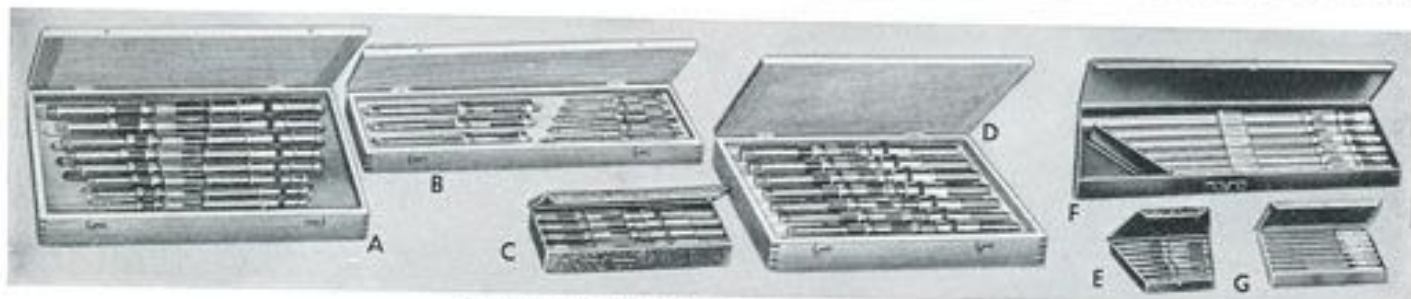
[C] Eliminate your reaming worries... get perfect alignment every time with these precision built Critchley type adjustable reamers. The blades are placed at the proper angle to give a smooth, shearing cut. Retaining collars at each end hold the blades firmly, protect the reamer nuts, and allow the reamer to be easily adjusted. Double-taper, counter-sunk bushings slide over the nut and collar of the reamer and follow after the blades as they are adjusted, making the reamer ideal for reaming short bushings.

| Stock No. | Size | Overall Length | Blade Length | Stock No. | Size | Overall Length | Blade Length |
|-----------|-----------------|----------------|--------------|-----------|-------------------|----------------|--------------|
| ★RP-437 | 1/8" - 1/4" | 9 1/4" | 2" | ★RP-915 | .915" - 1" | 12 1/4" | 2" |
| ★RP-500 | 1/4" - 3/8" | 9 1/4" | 2" | ★RP-985 | .985" - 1 1/16" | 12 1/4" | 2" |
| ★RP-562 | 3/8" - 1/2" | 9 1/4" | 2" | ★RP-1062 | 1 1/8" - 1 1/4" | 12 1/4" | 2" |
| ★RP-625 | 1/2" - 5/8" | 9 1/4" | 2" | ★RP-1125 | 1 1/4" - 1 1/2" | 13" | 3" |
| ★RP-687 | 5/8" - 3/4" | 12 1/4" | 2" | ★RP-1250 | 1 1/2" - 1 3/4" | 13" | 3" |
| ★RP-730 | 3/4" - 7/8" | 12 1/4" | 2" | ★RP-1375 | 1 3/4" - 1 7/8" | 13" | 3" |
| ★RP-812 | 7/8" - 1 1/8" | 12 1/4" | 2" | ★RP-1500 | 1 7/8" - 2" | 13" | 3" |
| ★RP-860 | 1 1/8" - 1 1/4" | 12 1/4" | 2" | ★RP-1625 | 1 3/4" - 1 13/16" | 15" | 3" |

ADJUSTABLE EXTRA LONG ALIGNING REAMERS

[D] One of the most frequent jobs on electric motors is the installation of new shaft bearings which must be line reamed to assure a smooth running motor. This can be done easily by putting the end bell in place on the motor frame and then reaming the bearings. In this manner you are assured of a true running motor with an extremely high percentage of bearing surface.

| Stock No. | Size | Blade Length | Reamer Length | Stock No. | Size | Blade Length | Reamer Length |
|-----------|-----------------|--------------|---------------|-----------|-----------------|--------------|---------------|
| ★RL-437 | 1/8" - 1/4" | 2" | 13 1/4" | ★RL-875 | 1 1/8" - 1 1/4" | 3" | 19" |
| ★RL-500 | 1/4" - 3/8" | 2" | 15" | ★RL-937 | 1 1/4" - 1 1/2" | 3" | 20" |
| ★RL-562 | 3/8" - 1/2" | 2" | 15" | ★RL-1000 | 1 1/2" - 1 3/4" | 3" | 21" |
| ★RL-625 | 1/2" - 5/8" | 2" | 16" | ★RL-1031 | 1 3/4" - 1 7/8" | 3" | 21" |
| ★RL-656 | 5/8" - 3/4" | 2" | 16" | ★RL-1062 | 1 7/8" - 2" | 3" | 21" |
| ★RL-687 | 3/4" - 7/8" | 2" | 17" | ★RL-1125 | 1 3/4" - 1 3/8" | 3" | 21" |
| ★RL-750 | 7/8" - 1 1/8" | 2" | 18" | ★RL-1250 | 1 3/8" - 1 3/4" | 3" | 24" |
| ★RL-781 | 1 1/8" - 1 1/4" | 2" | 18" | ★RL-1375 | 1 3/8" - 1 7/8" | 3" | 24" |
| ★RL-812 | 1 1/4" - 1 1/2" | 2" | 19" | ★RL-1500 | 1 7/8" - 2" | 3" | 24" |



REAMER SETS IN CONVENIENT FITTED BOXES

[A] ★RM-3 REAMER SET contains 8 reamers (with pilots), Nos. RM-468 to RM-937 (range 1/32" to 1 1/16"), in wood box.

[B] ★RM-1 REAMER SET contains 8 reamers (without pilots), Nos. RM-468 to RM-937 (range 1/32" to 1 1/16"), in wood box.

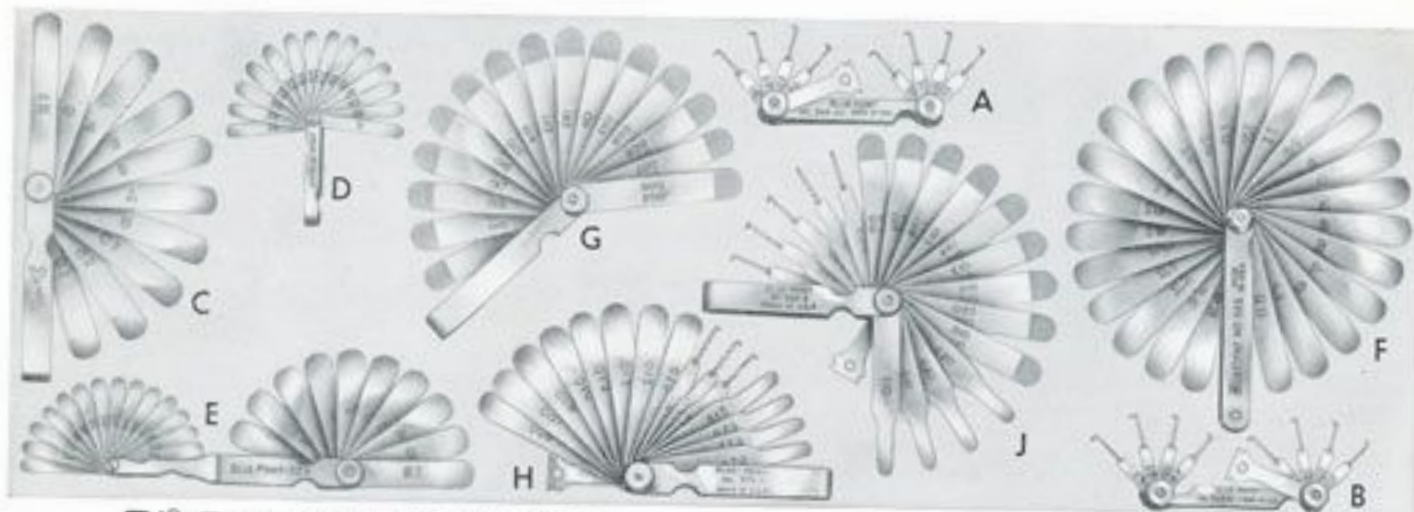
[C] ★RP-16B REAMER SET contains 4 reamers, Nos. RP-437 to RP-625 (range 1/8" to 1 1/8"), in metal box.

[D] ★RP-17B REAMER SET contains 7 reamers, Nos. RP-687 to RP-1062 (range 1 1/8" to 1 13/16"), in wood box.

[E] ★A-7 REAMER SET contains 7 small reamers, Nos. 8A to 2A (range 1/8" to 1 1/2"), in metal box.

[F] ★RL-19 REAMER SET contains 6 reamers, Nos. RL-500, RL-625, RL-687, RL-750, RL-812, and RL-1000 (range 1/2" to 1 1/8"), packed in metal box.

[G] ★394 REAMER SET contains 7 reamers with extension shank Nos. 395 to 401 (range 1/4" to 1 1/2"), packed in metal box. 384 EXTENSION SHANK SET contains 7 extension shanks Nos. 385 to 391 to fit reamers in A-7 set. Packed in cardboard box.



Blue-Point FEELER GAUGES WITH BLADES OF IMPORTED SWEDISH TEMPERED STEEL

All blades are tested for accuracy. Gauges are equipped with knurled nut permitting user to slide out the required blade and lock it in position.

A ★No. 309AW Aviation Wire Gap Gauge with eight sizes: .010, .012, .015, .018, .020, .022, .025, .030 and an electrode bender.

B ★No. 309W Automotive Wire Gap Gauge with eight sizes: .022, .025, .028, .030, .032, .035, .038, .040, and an electrode bender.

★Extra wires in any of above sizes are available at all times.

C ★310 Standard Feeler Gauge. Ten blades 3½" long in following thicknesses: .003, .004, .005, .006, .007, .008, .010, .012, .013 and .015.

D ★314 Ignition and Spark Plug Gauge. Fourteen fingers 1½" long in the following thicknesses: .008, .010, .012, .013, .015, .018, .020, .022, .024, .025, .028, .030, .032, .035.

E ★324 Combination Feeler and Ignition Gauge. Ten 2½" blades and fourteen 1½" fingers. Blade thicknesses: .003, .004, .005, .006, .007, .008, .010, .012, .013, and .015. Fingers: .008, .010, .012, .013, .015, .018, .020, .022, .024, .025, .028, .030, .032, .035.

F ★325 General Use Feeler Gauge. Contains the following 3½" blades. Sizes—.0013, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025.

G ★315 Step Feeler Gauge. Contains 15 "go, no-go" blades in the following sizes: .004-.006, .005-.007, .006-.008, .007-.009, .008-.010, .009-.011, .010-.012, .011-.013, .012-.014, .013-.015, .014-.016, .015-.017, .016-.018, .017-.019 and .018-.020.

Extra Blades and Fingers

★We can supply extra blades in regular thicknesses in 3½" or 2½" lengths and in fingers 1½" length.

H ★379C Chevrolet Feeler Gauge. Contains eight 3½" blades in thicknesses of .006, .007, .008, .010, .012, .013, .020; four finger blades .018, .020, .022 and .024; three wire gap gauges .032, .035 and .040 and an electrode bender.

J ★359B Ford Feeler Gauge. Contains three spark gap bent wire feelers .023, .028, .030; two straight wire feelers for voltage regulator cutout; four ignition taper blades .013, .015, .020, .025; nine step-ground blades .010-.012, .011-.013, .012-.014, .013-.015, .014-.016, .015-.017, .016-.018, .017-.019, .018-.020 and an electrode bender.

12" Strips

★Following sizes of feeler gauge stock are available in 12" strips: .0013, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020 and .022.



BALL PEEN HAMMERS

A Quality from start to finish, these sturdy, well balanced hammers are correctly designed, balanced, and heat treated to make them the most serviceable for all around work. Drop forged from high grade alloy steel, they will withstand long, hard use. The handles are securely anchored in the heads and are made of selected second growth, well seasoned hickory, carefully turned so that the grain runs full length of handle to give maximum strength and resiliency. Extra handles can be purchased as listed below—each comes complete with two metal and one wood wedge.

| Hammer Complete | | Extra Handle |
|-----------------|---------|--------------|
| Stock No. | Weight | Stock No. |
| 7/0 | 2 oz. | ★7-0-H |
| 5/0 | 4 oz. | ★5-0-H |
| 3/0 | 8 oz. | ★3-0-H |
| 2/0 | 12 oz. | ★012-0-H |
| 0 | 1 lb. | ★012-0-H |
| 1 | 1½ lbs. | ★012-0-H |
| 2 | 1½ lbs. | ★24-H |
| 4 | 2 lbs. | ★24-H |
| 6 | 2½ lbs. | ★68-H |
| 8 | 3 lbs. | ★68-H |

CELLULOSE TIP HAMMERS

B For any kind of work where precision finished or delicate parts would be injured by metal hammers. The tips are tough plastic and will stand a lot of pounding without undue marring of the faces . . . tips are easily replaced when necessary. Three sizes are available. Center part of head is enameled steel.

| Hammers Complete | | Extra Tips | | Extra Handles |
|------------------|--------|------------|-----------|---------------|
| Stock No. | Weight | Stock No. | Tip Diam. | Stock No. |
| ★91-PH | 1½ lb. | ★91-PH-2 | 1½" | ★91-PH-3 |
| ★92-PH | 1 lb. | ★92-PH-2 | 1½" | ★91-PH-3 |
| ★693 | 2 lbs. | ★693-A | 1½" | ★693-H |

UPHOLSTERER'S HAMMER

C ★No. 602 Upholsterer's Hammer. Will prove useful in any shop, especially those doing body work. The steel head is 5½" long with a "split-type" magnetic tip on one end and a larger flat face on the other. Weighs 7 oz. . . 10¼" long.

★No. 602-2 Extra Handle Only.

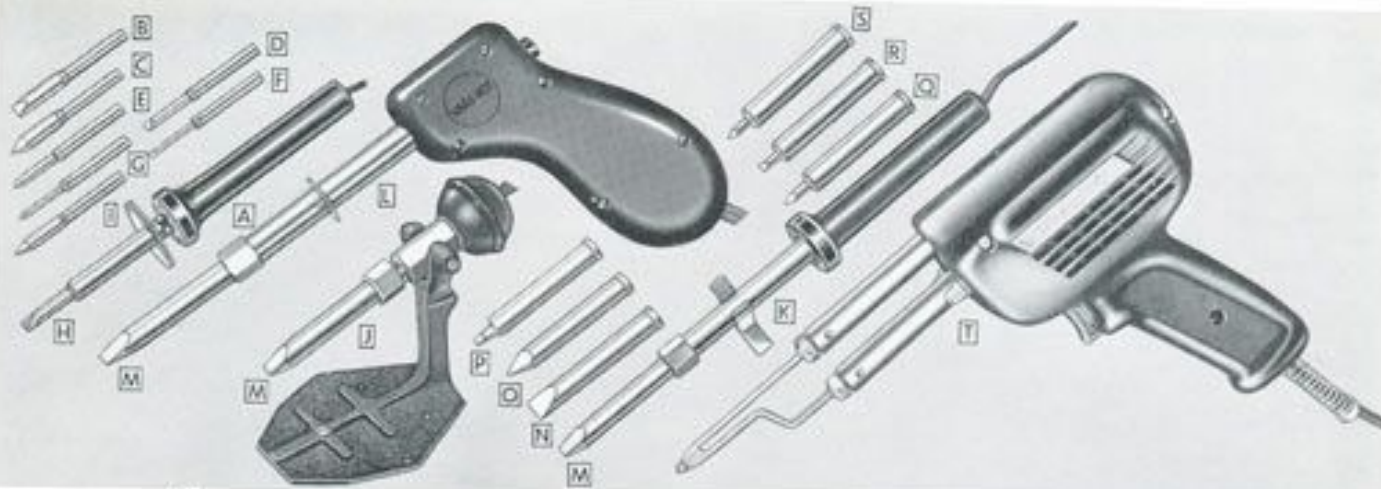
FEELER GAUGE HOLDER

D H-312 Feeler Gauge Holder. 10" long holder designed to hold two 12" feeler blades. Blades extend 2" or further if desired and are held firmly by two sliding end clamps. The two-blade feature is handy where intake and exhaust valve specifications differ or for use as a go and no-go gauge. The extra length available when the blades are extended is very useful in gauging parts that are otherwise difficult to reach.

SCRAPERS

For removing old gaskets, paint, undercoating compound, hardened grease, etc. The alloy steel blades are ground to uniform thickness for proper degree of stiffness and "mirror" finish for easy cleaning and to retard rusting. The light plastic handles are practically unbreakable and are fastened with steel rivets.

- E** PK-11 Bent Scraper. 1½" blade
- F** PK-12 Straight Scraper. 1½" blade.
- G** PK-13 Chisel Edge Scraper. 1½" blade.



Snap-on INDUSTRIAL TYPE ELECTRIC SOLDERING IRONS

"VARI-HOT" MODELS FOR CONTINUOUS USE WITH CONTROLLED TEMPERATURES

These specialized types of soldering irons were engineered for electronics, radio, TV, and similar industries where a variety of soldered connections are made round-the-clock. They provide you with light weight, compact, easy-to-use irons that minimize operator fatigue and maintain a constant tip temperature for continuous operation. Six foot cords have a Coropex covering that is impervious to oil, grease, or temperature.

A PENCIL IRON

This feather weight model gets into restricted areas for tiny soldering jobs such as sub-assembly on high speed industrial production work. It operates on 115 volt AC/DC and maintains a constant tip temperature of 350° F. at only 18 watts. Eight different nickel plated copper tips provide a range of sizes and styles for every soldering job. Wipe these tips when hot to clean them—do not file them. The barrel and heating element form a one-piece unit with the end open to receive the tip. A slight taper about 1/4" from the end of the tip holds it tightly in the barrel yet allows it to be interchanged instantly. A hexagon collar prevents the iron from rolling and keeps the tip off the bench. Black plastic handle is shockproof and stays cool at all times. Overall length 7 1/2", weight 5 oz.

A R-130 Pencil Iron with R-130-16 1/8" Chisel Tip only.

Additional Tips for Pencil Iron

| | |
|-------------------|--------------------|
| B R-130-10 | 1/8" Chisel Tip |
| C R-130-11 | 3/16" Pyramid Tip |
| D R-130-12 | 1/4" Chisel Tip |
| E R-130-13 | 5/16" Pyramid Tip |
| F R-130-14 | 1/2" Chisel Tip |
| G R-130-15 | 3/4" Pyramid Tip |
| H R-130-16 | 1" Chisel Tip |
| I R-130-17 | 1 1/4" Pyramid Tip |

R-130S Set The R-130 Iron and one each of above eight tips.

J STAND IRONS

These benchwork irons consist of a very short heating unit and tip—only 5 1/2" long—mounted on a metal stand. The iron assembly mounts to this stand (as illustrated) with two set screws and is adjustable up and down to the most convenient working position. Holes are provided in the base for vertical mounting if desired.

The heating element is actually in the hollow tip and provides a very stable working temperature even under continuous operation. The seven different Vanderloy plated copper tips listed at bottom of page and are quickly and easily interchangeable to suit the job. The R-120 is the standard model. Three additional models with different operating temperatures are available on special order. All models operate on 115 Volt AC/DC and include the R-115A-9 Tapered Chisel Tip as standard equipment. Tool weights 12 oz.

| | |
|---------------------------|----------------------|
| J R-120 Stand Iron | 1825° F. at 35 watts |
| K R-121 Stand Iron | 1530° F. at 25 watts |
| L R-122 Stand Iron | 1630° F. at 40 watts |
| M R-123 Stand Iron | 1910° F. at 75 watts |

*Available on special order only.

ADDITIONAL TIPS FOR ABOVE STAND,

Tips have special "Vanderloy" plating which "tins" very readily and will give a great many extra hours of operating service. These tips should never be filed and care should be taken not to damage the plating, otherwise the copper will become exposed and difficulties common to ordinary tip care will occur. Simply wipe these tips when hot to clean them, and they will last indefinitely.

K STRAIGHT IRONS

Light weight straight irons for all around industrial use. The heating element extends into the hollow tip to provide fast heating and maintain the constant tip temperatures listed below. Seven different tips listed at bottom of page are quickly interchangeable. The plastic handle is shockproof and stays cool even under continuous operation . . . it flares out at the tip end for convenient grip and prevents burns by keeping fingers away from the barrel. A clip stand is included to hold the tip of the iron off the bench or for attaching the iron to the wall.

The R-125 is the standard model. Three additional straight irons with different operating temperatures are available on special order. All models are 115 Volt AC/DC and include the standard R-115A-9 Tapered Chisel tip. Length 10 1/2", weight 7 oz.

| | |
|------------------------------|----------------------|
| K R-125 Straight Iron | 1825° F. at 35 watts |
| L R-126 Straight Iron | 1530° F. at 25 watts |
| M R-127 Straight Iron | 1630° F. at 40 watts |
| N R-128 Straight Iron | 1910° F. at 75 watts |

*Available on special order only.

P PISTOL GRIP 2-SPEED IRONS

Reach Soldering Heat in 40 Seconds

This iron goes to work fast . . . pressing the button shoots a booster charge of 100 watts within the tip—brings it to soldering heat in 40 seconds. Then, without using the button, 25 watts maintain 500° F. tip temperature. The hermetically sealed dual element is located entirely within the tip—right where you want the heat . . . element wires are non-corroding metal. Full current is always available by pressing the button. A sliding collar on the shaft keeps the hot tip away from the bench surface when laid down . . . yet pushes up the shaft to allow entrance through small openings. Phosphor-bronze switch has pure silver contact points—will not flash or arc.

For standard power circuits order Model R-115A, 115-115 Volt AC/DC unit. For aircraft and marine use from ship's supply order Model R-28A, 28-32 Volt AC/DC unit. This latter model affords the same temperatures as the R-115A. The 28 volt input is 0.9 amps, at idling temp., and 3.6 at high heat. **R-115A Iron** 115 Volt AC/DC with R-115A-9 Tapered Chisel Tip only. Weight 10 oz.

R-1157 Set R-115A Iron with all seven tips listed below.

| |
|--|
| R-28A Iron 28 Volt AC/DC with R-115A-9 Tapered Chisel Tip only. Weight 10 oz. |
| R-287 Set R-28A Iron with all seven tips listed below. |
| R-115A-9 Tapered Chisel Tip |
| R-115A-10 Full Chisel Tip |
| R-115A-11 Full Pyramid Tip |
| R-115A-12 1/8" Dia. Chisel Tip |
| R-115A-13 3/16" Dia. Pyramid Tip |
| R-115A-14 1/4" Dia. Chisel Tip |
| R-115A-15 5/16" Dia. Pyramid Tip |

R1156 Set. All above tips except R-115A-9.

T INSTANT HEAT SOLDERING GUN

Saves Time on All Soldering Jobs

● Faster Heat. This heavy duty transformer type Snap-on soldering gun heats to solder melting temperature in only five seconds after you press the trigger . . . You eliminate waiting time and get the job done faster and more efficiently. There being very little metal in the tip, it cools very rapidly when trigger is released and as the switch cannot be locked in heating position, there is no danger of burning or starting a fire when the gun is put down during use.

● Dual Heat. A 2-position switch is provided on this gun . . . when the trigger "clicks" at the halfway position the tip receives 200 watts of instant heat, enough for most jobs—pull the trigger all the way and you shoot 275 watts to the tip for heavier work.

● Dependable Heat. Every unit of the Snap-on Soldering Gun is engineered and built to give you long reliable service.

● Replaceable Tips. The copper alloy wire-type tip may be bent to reach awkward places. Tips are easily replaced and right angle bends at the locked ends assure positive contact with no danger of working loose or slipping out . . . you always get full wattage at the tip without arcing or burning at the contact areas.

● Two Spotlights. They light when the trigger is pulled and provide shadow-free lighting on the work . . . no need for extension lights.

● Plastic Housing. Side gridwork provides ventilation to the transformer. The large pistol grip handle is well rounded for a comfortable fit to the hand and the fine balance of the gun helps cut working fatigue.

● Heavy Duty Cord. Enters at base of handle and is fitted with a metal strain reliever that prevents kinking or breaking at that point. Cord is 5 foot long.

T R-275 Instant Heat Soldering Gun. For 115 volt A.C. current only. Will not work on direct current.

R-275-1 Extra Tips. (Package of two complete tips).

Guarantee. The gun is guaranteed against defects in material or workmanship for one year, tips are not guaranteed.

ELECTRIC SOLDERING IRONS



GA-35 Soldering Iron. Has a large, heavy 1 1/2" tip. Will hold heat much longer than smaller irons. Solid compressed copper tips are easily replaceable. This model is for 105-120 volts AC/DC, 275 watts. 210-240 volt irons available.

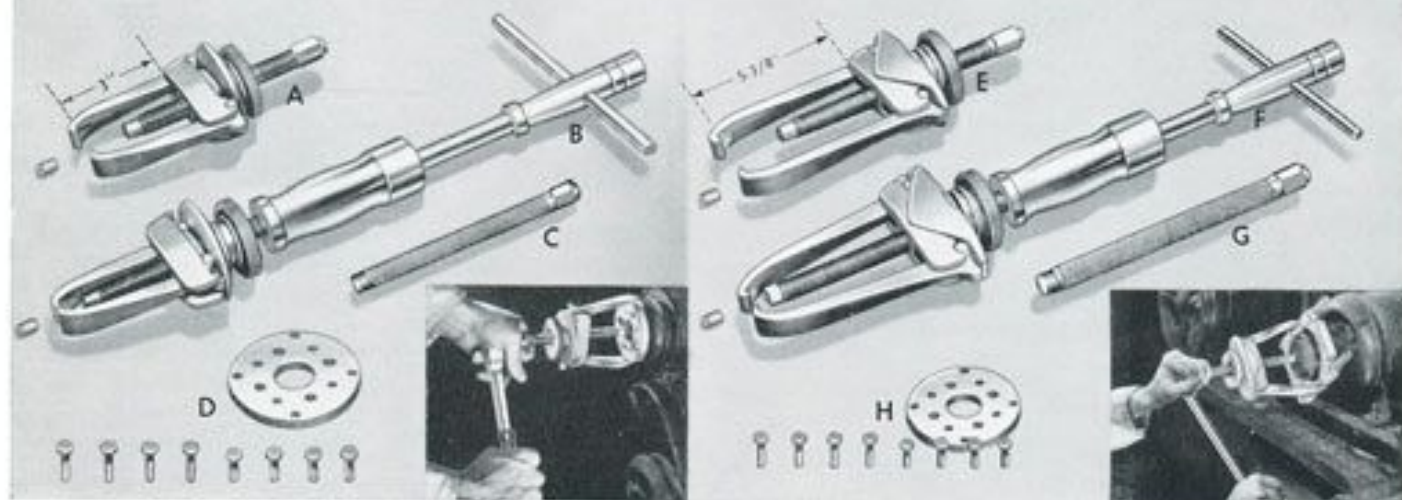
GA-35A Extra 1 1/8" tip.

GA-20 Soldering Iron. Has a 1/2" tip for radio and other light work. It is fast heating and holds heat long enough for this class of work. 105-120 volts, AC/DC 90 watt. We also have 210-240 AC/DC soldering irons available on special order.

GA-20A Extra 1/4" tip.

Snap-on GEAR PULLERS

Give more locking power than



Give you SAFE, UNIFORM POWER over the entire pulling range
JAWS LOCK ONTO THE JOB—NO SLIPPING OR TIPPING

SNAP-ON Gear Pullers are offered in four different sizes, with the two smaller models available in either standard or slide hammer type or as a combination of both. The Medium Puller is also available as either a two or three jaw model. The two larger model pullers are made in the standard pressure screw type only. The yoke and jaw construction is the same on both Standard and Slide Hammer models—built on a principle that locks the jaws onto the job with a bulldog grip—pulls small gears as easily as big ones—produces safe, uniform power over the entire pulling range. A principle that gives you slipless, tipless pulling. Yokes are equipped with 2 slots for each jaw to provide better

gripping power on smaller jobs. Jaws are reversible for either "inside" or "outside" holds and jaw tips are sturdily built and especially heat treated to provide ample strength for any job within the size capacity of the tool. A circular plate attachment (which is included in some of the small and medium puller sets) adapts the pullers to handle tapped pulleys, tapered gears, etc., as shown in the photograph at the upper left. The centralized, guided shock of the booster hammer, combined with the screw tension, provides a pulling force unequalled by any other method . . . distributing the pull equally on all sides, it eliminates binding of the part on the shaft and does the job quickly and safely.

SMALL 2-JAW PULLERS—4½" JAW CAPACITY

Jaws have a 4½" maximum spread on outside holds and operate through 1½" openings for inside holds. Power capacity 7½ tons. Five different models are available. Pressure screw can be turned with any standard ¾" wrench and has a pointed tip to center on turned shafts. All parts are made of finest steel and jaws are drop-forged for extra strength. When used with the circular plate attachment, these pullers will pull various tapered pulleys and gears. Illustration above shows how the plate is attached to the pulley and then used to give a gripping surface for the jaws of the puller. A pressure screw point protector is included with each set while the circular plate attachment is included with three models only. See parts list below.

- A CG-250 Small Basic Gear Puller
 A,D CG-250A Small Standard Gear Puller
 B CG-250H Small Basic Slide Hammer Gear Puller
 B,D CG-250HA Small Standard Slide Hammer Gear Puller
 B,C,D CG-250C Small Combination Gear Puller

MEDIUM 2-JAW PULLERS—8½" JAW CAPACITY

Jaws have a 8½" maximum spread on outside holds and fit through 2½" diameter opening for inside holds. Power capacity 10 tons. Five different models are available as listed below. ¾" hex head on pressure screw. Its capacity covers a wide range of gears and pulleys, etc. The illustration above shows it being used in conjunction with a bearing separator to pull a V-belt pulley from an electric motor. The circular plate attachment is included with three models while the screw tip protector is included with all sets to protect the screw tip when used on shafts without a center hole. Drop forged jaws provide maximum strength. Content of sets is shown at bottom of page.

- E CG-270 2-Jaw Medium Basic Gear Puller
 E,H CG-270A 2-Jaw Medium Standard Gear Puller
 F CG-270H 2-Jaw Medium Basic Slide Hammer Gear Puller
 F,H CG-270HA 2-Jaw Medium Standard Slide Hammer Gear Puller
 E,G,H CG-270C 2-Jaw Medium Combination Gear Puller

Parts List of units comprising Small and Medium Puller Sets

| DESCRIPTION | Stock No. | CG-250 | CG-250A | CG-250H | CG-250HA | CG-250C | Stock No. | CG-270 | CG-270A | CG-270H | CG-270HA | CG-270C | Stock No. | CG-270 | CG-270A | CG-270H | CG-270HA | CG-270C |
|---|-----------|--------|---------|---------|----------|---------|-----------|--------|---------|---------|----------|---------|-----------|--------|---------|---------|----------|---------|
| Hexhead Screw | CG-250-1 | 1 | 1 | 1 | 1 | 1 | CG-270-1 | 1 | 1 | 1 | 1 | 1 | CG-270-1 | 1 | 1 | 1 | 1 | 1 |
| Yoke (2 Jaw) | CG-250-2 | 1 | 1 | 1 | 1 | 1 | CG-270-2 | 1 | 1 | 1 | 1 | 1 | CG-270-2 | 1 | 1 | 1 | 1 | 1 |
| Yoke (3 Jaw) | CG-250-3 | 1 | 1 | 1 | 1 | 1 | CG-270-3 | 1 | 1 | 1 | 1 | 1 | CG-270-3 | 1 | 1 | 1 | 1 | 1 |
| Jaw | CG-250-4 | 1 | 1 | 1 | 1 | 1 | CG-270-4 | 1 | 1 | 1 | 1 | 1 | CG-270-4 | 1 | 1 | 1 | 1 | 1 |
| Locking Plate (2 Jaw) | CG-250-5 | 1 | 1 | 1 | 1 | 1 | CG-270-5 | 1 | 1 | 1 | 1 | 1 | CG-270-5 | 1 | 1 | 1 | 1 | 1 |
| Locking Plate (3 Jaw) | CG-250-6 | 1 | 1 | 1 | 1 | 1 | CG-270-6 | 1 | 1 | 1 | 1 | 1 | CG-270-6 | 1 | 1 | 1 | 1 | 1 |
| Spring | CG-250-7 | 1 | 1 | 1 | 1 | 1 | CG-270-7 | 1 | 1 | 1 | 1 | 1 | CG-270-7 | 1 | 1 | 1 | 1 | 1 |
| Adjusting Nut | CG-250-8 | 1 | 1 | 1 | 1 | 1 | CG-270-8 | 1 | 1 | 1 | 1 | 1 | CG-270-8 | 1 | 1 | 1 | 1 | 1 |
| Slide Screw Bar | CG-250-9 | 1 | 1 | 1 | 1 | 1 | CG-270-9 | 1 | 1 | 1 | 1 | 1 | CG-270-9 | 1 | 1 | 1 | 1 | 1 |
| Booster Hammer | CG-250-10 | 1 | 1 | 1 | 1 | 1 | CG-270-10 | 1 | 1 | 1 | 1 | 1 | CG-270-10 | 1 | 1 | 1 | 1 | 1 |
| Circular Plate Attach. with four each ¼"-20 and ¾"-28 Bolts | CG-250-11 | 1 | 1 | 1 | 1 | 1 | CG-270-11 | 1 | 1 | 1 | 1 | 1 | CG-270-11 | 1 | 1 | 1 | 1 | 1 |
| 1/8" diameter Screw Point Protector | CG-250-12 | 1 | 1 | 1 | 1 | 1 | CG-270-12 | 1 | 1 | 1 | 1 | 1 | CG-270-12 | 1 | 1 | 1 | 1 | 1 |
| Cross Bar | CG-250-13 | 1 | 1 | 1 | 1 | 1 | CG-270-13 | 1 | 1 | 1 | 1 | 1 | CG-270-13 | 1 | 1 | 1 | 1 | 1 |

MAKE THE JOB EASIER!

other pullers of their size



MEDIUM 3-JAW PULLERS—8½" JAW CAPACITY

These pullers have a maximum jaw capacity of 8½" on outside holds and will operate through a 3½" opening for inside pulls. They have a 10 ton power capacity. With the exception of the 3-way yoke and locking plate all parts are identical to the CG-270 sets shown on page 86. If you already own one of the CG-270 sets you can adapt it to 3-jaw use by adding only the 3-way yoke, 3-way locking plate and one extra jaw as all the other parts are interchangeable. Yoke has two sets of slots to enable the jaws to be set closer to the screw for better gripping power on smaller jobs. Parts are listed at bottom of page 86.

| | | |
|---|----------|---|
| I | CG-273 | 3-Jaw Medium Basic Puller |
| J | CG-273A | 3-Jaw Medium Standard Puller |
| K | CG-273H | 3-Jaw Medium Basic Slide Hammer Puller |
| L | CG-273HA | 3-Jaw Medium Standard Slide Hammer Puller |
| M | CG-273C | 3-Jaw Medium Combination Puller |

GEAR PULLER SCREW POINT PROTECTORS

These Screw Point Protectors fit over the tapered point of the puller pressure screw and prevent it from being damaged when puller is used on a shaft without a center hole. Three sizes for different diameter pressure screws are available.

CG-10 Set of 3 Screw Point Protectors

| | |
|------|-----------------------------|
| CG-6 | 5/16" Screw Point Protector |
| CG-7 | 3/8" Screw Point Protector |
| CG-8 | 1/2" Screw Point Protector |



Maintenance mechanic shown using the CG-300 gear puller, L-715 ratchet and TW-321 single hex socket to remove belt driving flange from motor.



LARGE PULLER—12" JAW CAPACITY

9½" Reach . . . 12" maximum jaw spread on outside hold. On inside pulls, jaws operate through openings 3½" in diameter. Its 20 ton power capacity makes this the puller for those big, tough jobs. Jaws are forged from special alloy steel then heat treated and hardened for the strength to stand up under severe punishment. This model comes in the screw type only. Once set, you merely apply pressure to screw, and stubborn gears and pulleys are loosened without danger to any of the parts. Pressure screw has 1" hexagon head for convenient operation with a standard wrench. Parts making up this puller are listed below.

M CG-300 Large Standard Gear Puller.

EXTRA LARGE PULLER—14" JAW CAPACITY

Over 14" reach . . . 14" jaw capacity on a standard 4" face gear—or 16" jaw capacity on a 3½" face gear. Pressure screw has a 1" hexagon head and can be turned with any standard wrench of that size. Here are over 20 tons of pulling power harnessed through extra long jaws to reach gears, etc., that cannot be touched with other pullers. Industrial maintenance men like these SNAP-ON pullers because they are easily hooked up to the job . . . the knurled jaw adjusting nut tightens the locking plate and clamps the jaws behind the gear . . . once locked on they stay locked on until you release them. SNAP-ON pullers work quickly—surely—safely.

N CG-305 Extra Large Gear Puller.

Parts list of units comprising above Large and Extra Large Pullers

| CG-300 PULLER | | Part Description | CG-305 PULLER | |
|---------------|----------|------------------|---------------|----------|
| Part No. | Quantity | | Part No. | Quantity |
| CG-300-1 | 1 | Hexhead Screw | CG-305-8 | 1 |
| CG-300-2 | 1 | Yoke | CG-300-2 | 1 |
| CG-300-3 | 2 | Jaw | CG-305-9 | 2 |
| CG-300-5 | 1 | Locking Plate | CG-300-5 | 1 |
| CG-300-6 | 1 | Spring | CG-300-6 | 1 |
| CG-300-7 | 1 | Adjusting Nut | CG-300-7 | 1 |

LONG JAWS FOR INSIDE PULLING JOBS

Interchangeable With Standard Jaws on CG-250, CG-270 and CG-273 Series Pullers

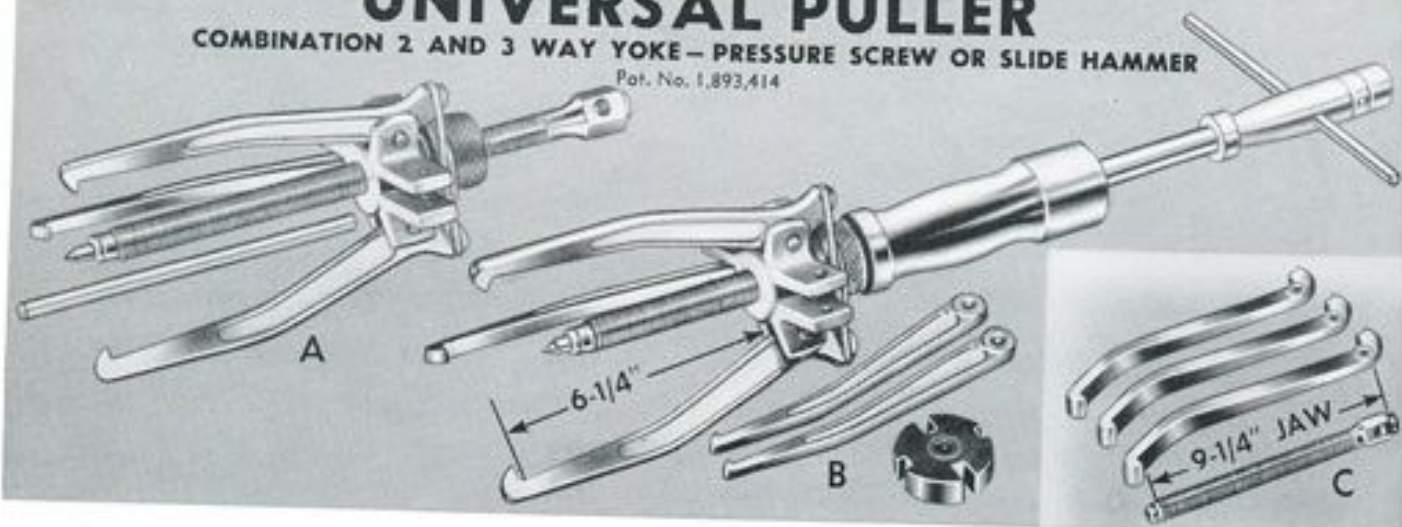


★CG-250-10 Long Jaw. Increase the usefulness of your small and medium puller sets. Designed for inside pulling of bearings, bushings, etc., they "lock-on" for inside holds up to 8" in diameter and will reach into a 3/4" opening to a depth of 3" before binding. Can also be used for light work on outside holds. Overall length 7½".

UNIVERSAL PULLER

COMBINATION 2 AND 3 WAY YOKE—PRESSURE SCREW OR SLIDE HAMMER

Pat. No. 1,893,414



You can handle pulling jobs easily—quickly—safely with SNAP-ON Universal Pullers. They are available as pressure screw type or as the slide hammer type and they provide definite advantages over ordinary pullers. The booster hammer gives a sudden, powerful blow, guided by the slide shaft

in the same direction as the pull. This guided blow combined with the centered screw tension is more effective than any other pulling force. The force is distributed equally on all sides of the job and prevents it from binding. The short pressure screw puller is efficient where working space is limited.

IMPORTANT FEATURES

Simple design—easy and quick to use.

Booster Hammer gives a sudden, powerful blow, guided by the shaft in the direction of the pull.

Guided Blow combined with center tension is the most effective pulling force . . . because—

Pulling Force is distributed equally on all sides of the pull, prevents binding of the unit being pulled.

Short screw services jobs in close places where the slide hammer cannot be used. Screw hex head fits a $\frac{3}{4}$ " wrench.

2 and 3-way yoke adapts the tool to any type of work. The 2-way throw is used for internal pulling jobs, or where a 3-way grip cannot be used. Where possible, use a 3-way throw to better distribute the pulling force.

Locking Feature contributes to ease of handling the puller. A collar, locking nut and spring hold the jaws open or lock them on the job. Once locked on they cannot slip off and cause trouble.

Spreader Disc has two sets of guide channels to provide a wide range of expansion while holding the jaws in line.

Yoke Pins are fitted with friction balls for easy interchange of units.

Jaw Capacity. Small jaws insert through $\frac{1}{2}$ " opening for internal pulling. Capacity of medium jaws $6\frac{1}{4}$ ", of large jaws 10".

A CJ-63 Universal Screw-type Puller. Provides the basic tool to which you can add units as needed.

B CJ-66A Universal Slide-hammer Puller. Contains parts for outside and inside pulling jobs.

B/C CJ-68 Universal Combination Puller. All parts listed below. Gives you either a slide hammer or a screw-type puller.

Parts Comprising Above Pullers

| Stock No. | Description | Set CJ-63 | Set CJ-66A | Set CJ-68 |
|-----------|--------------------|-----------|------------|-----------|
| 66-1 | Slide Hammer Shaft | 1 | 1 | 1 |
| 66-2 | Booster Hammer | 1 | 1 | 1 |
| 66-3 | Combination Yoke | 1 | 1 | 1 |
| 66A-5 | Medium Jaw | 3 | 3 | 3 |
| 66A-6 | Small Jaw | 2 | 2 | 2 |
| 66-7-1 | Locking Collar | 1 | 1 | 1 |
| 66-7-2 | Locking Collar Nut | 1 | 1 | 1 |
| 66-8A | Spreader Disc | 1 | 1 | 1 |
| 66-8A-1 | Set Screw | 1 | 1 | 1 |
| 66-9 | Yoke Pin | 3 | 3 | 3 |
| 66-10 | Centering Adapter | 1 | 1 | 1 |
| 66-11 | Spring Retainer | 1 | 1 | 1 |
| 66-12 | 13" Pressure Screw | 1 | 1 | 1 |
| 66-13 | Large Heavy Jaw | 1 | 1 | 1 |
| 10-F | Bar Handle | 1 | 1 | 1 |

LARGE SLOTTED YOKE PULLER

A CJ-84 Large Slotted Yoke Puller. Useful in maintenance work for pulling tapped bearings, pulleys, gears, etc. The short screw on this puller—only 4 3/8" long—makes it very useful for close quarter work on small tapped pulleys, etc. The 3/8"-16 threaded studs fit the CJ-950 Bearing Separator holes. Use a 3/4" wrench to turn the pressure screw. Yoke is 3" wide.

REPLACED BY CJ-84A
See Catalog New Page 88-A

SMALL SLOTTED YOKE PULLER

B CJ-83B Small Slotted Yoke Puller. The short screw on this puller—only 4 3/8" long—makes it very useful for close quarter work on small tapped pulleys, etc. The 3/8"-16 threaded studs fit the CJ-950 Bearing Separator holes. Use a 3/4" wrench to turn the pressure screw. Yoke is 3" wide.

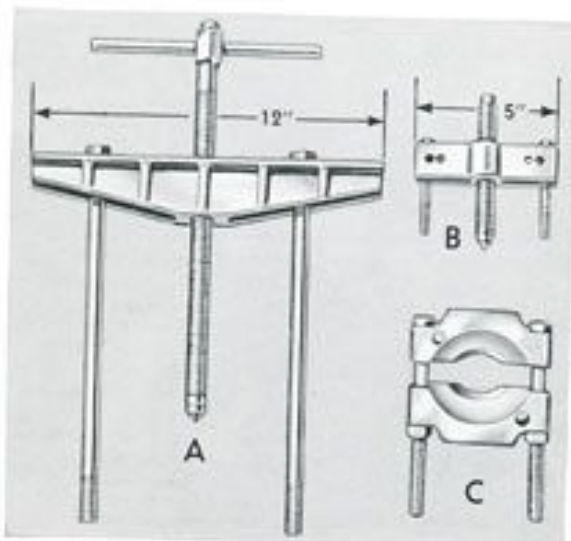
BEARING SEPARATORS

C For separating and pulling double bearings, closely fit gears, etc. Use with 2 jaw or slotted yoke pullers.

CJ-950 Separator. 2 1/4" O.D. capacity. Use with CJ-83B above or CG-250A (page 86) or 3/4"-16 studs.

CJ-951 Separator. 4 1/4" O.D. capacity. Use with CJ-84 above or CG-270A (page 86) or 3/4"-16 studs.

CJ-952 Separator. 5 1/4" O.D. capacity. Use with CJ-84 above or CG-300 (page 87) or 3/4"-16 studs.



EXTRA HEAVY DUTY GEAR PULLER

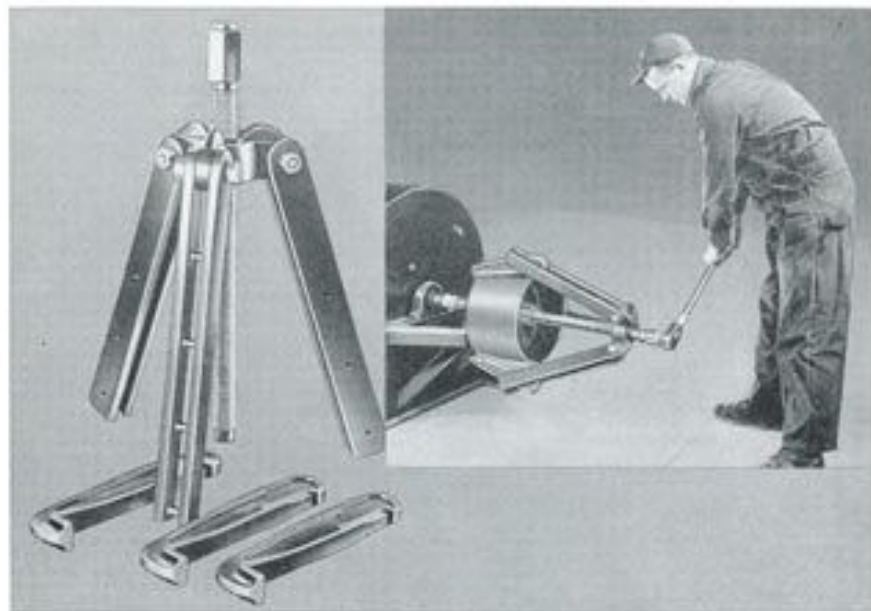
25 Tons of Pulling Power for Heavy Machinery Maintenance

CG-325 Extra Heavy Duty Puller. Handles gears and pulleys up to 20" diameter and has a reach of 20". Is adaptable as a three-jaw or two-jaw puller. Yokes and jaws are heat treated malleable iron, comparable in strength to heat treated alloy forgings. The 1 1/2" diameter screw has a hexagon head and can be turned with any standard 1 1/2" wrench.

Jaws hook into either of three positions on the arms and are semi-locked there by friction balls . . . once set properly, they grip tighter with each turn of the pressure screw, and cannot slip off.

This rugged tool develops a gradual build-up of power to pull the toughest jobs without the smashing sledge blows and shocks which might damage machinery parts.

Here is 25 tons of controlled pressure to pull those big, tough jobs surely and safely—more than ample power to handle any job within its jaw capacity.



CHAIN-TYPE UNIVERSAL PULLING TOOL

3 Ton Capacity



GP-2 Chain-type Puller. Truly universal, this tool will pull large spoked wheels and small solid gears with equal ease—close up or at a considerable distance from the end of the shaft. It will operate in the most awkward places, in close quarters, or will even pull over or through other pulleys or wheels—wherever the chains will lead.

The puller is equipped with three chains, each three feet long with 1/4" diameter links. Each link is welded and the chains are proof tested well over their rated strength of 2,000 pounds each. Each chain is equipped

with both Chain Hooks for use on spoked wheels, etc., and special Close-Grip Hooks to pull motor pulleys, bushings, pinions and shives, etc. Yoke is certified malleable iron and pressure screw is chrome nickel steel with hardened point.

This chain-type puller has the effectiveness of several miscellaneous pullers and any plant will find innumerable uses where it will save time and protect equipment.

INDUSTRIAL PULLER SET



CG-609 Industrial Puller Set.—The eight units illustrated above will provide a size capacity up to 14" in diameter with a power capacity up to 20 tons. Includes the CG-250, CG-270, CG-273, CG-300 and CG-305 Pullers, the CJ-950, CJ-951 and CJ-952 Bearing and Gear Separators and the CG-10 set of Point Protectors.

PILOT BEARING PULLER

A-78 Pilot Bearing Puller. For clutch pilot bushings as well as small bearings in motors, generators, etc. Pulling capacity of the puller is 3/8" to 1 1/4". The larger jaws are designed to remove bronze or oilite bushings without danger of crumbling them.

Tool Contains These Parts

- A-78-1....."U" Shape Body
- A-78-2.....Jaw Holder
- A-78-3.....Large Jaw (2)
- A-78-4.....Small Jaw (2)
- A-78-5.....Pressure Screw
- A-78-6.....Jaw Pin (2)
- A-78-7.....Bar Handle
- A-78-9.....Pressure Nut



SMALL PULLER TOOLS

B CG-30 Small Bearing and Gear Puller. This sturdy tool has forged jaws and is a fine puller for small pulling jobs. Jaws swing open for placement on the job, and the spring action on the yoke closes and holds them in position while the screw is tightened—the harder the pull—the tighter the grip.

The jaws spread to 1 1/2" and accommodate gears up to 3/4" thick. Maximum distance from the pressure screw to the jaw tips with the jaws open is 1 1/2".

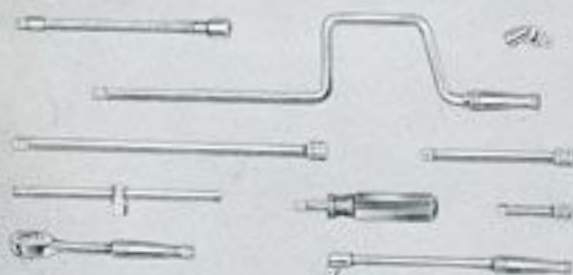
C GA-21 Battery Cable Puller. A small screw-type puller with spring loaded self-locking jaws. The tool may be held between the thumb and forefinger to hold the jaws open until ready for placement under the cable terminal.



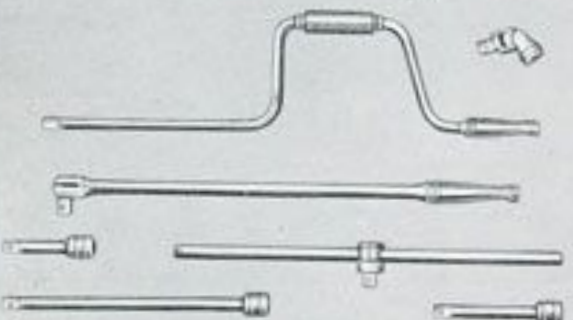
When finger pressure is released, the jaws will hold themselves in place, and a few turns of the screw will lift the tightest terminal. Apart from battery terminal work, the GA-21 is a general purpose puller for small gears, bearings, etc.



113-TM-B MIDGET SET



244-F FERRET SET

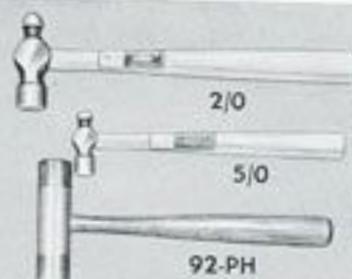


323-M MASTER SET



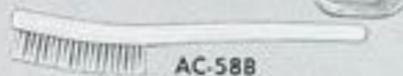
KR-56 Tool Chest

This Chest and its companion Roll-Cab are described in detail on page seventy-six.



92-PH

HS-9



AC-58B



87

196



208

137

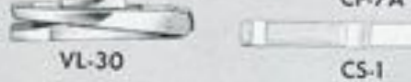


CF-49

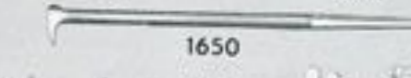


VL-30

CF-7A



CS-1

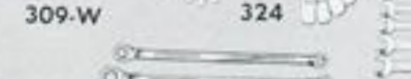


1650



309-W

324



C-810 SET



XV-608 SET



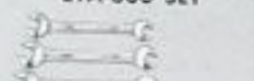
OE-809A SET



XS-607 SET



LTA-806 SET



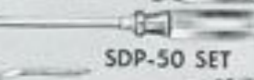
SD-145



GA-12



SDP-50 SET



RGS-60 SET



5166-GS-B MECHANICS STANDARD SERVICE SET

An excellent set for every mechanic servicing factory machines and equipment, gasoline or diesel engines, motors, cars and trucks, materials handling equipment and so forth. Here are 166 basic tools which will help him work faster and do a more efficient job. Socket sizes range from 3/16" to 1 1/4" in 1/8", 3/8" and 1/2" square drives. "Boxsockets" are 3/16" to 1 1/4", open end wrenches 1/2" to 1". Set includes the KR-56 Tool Chest.

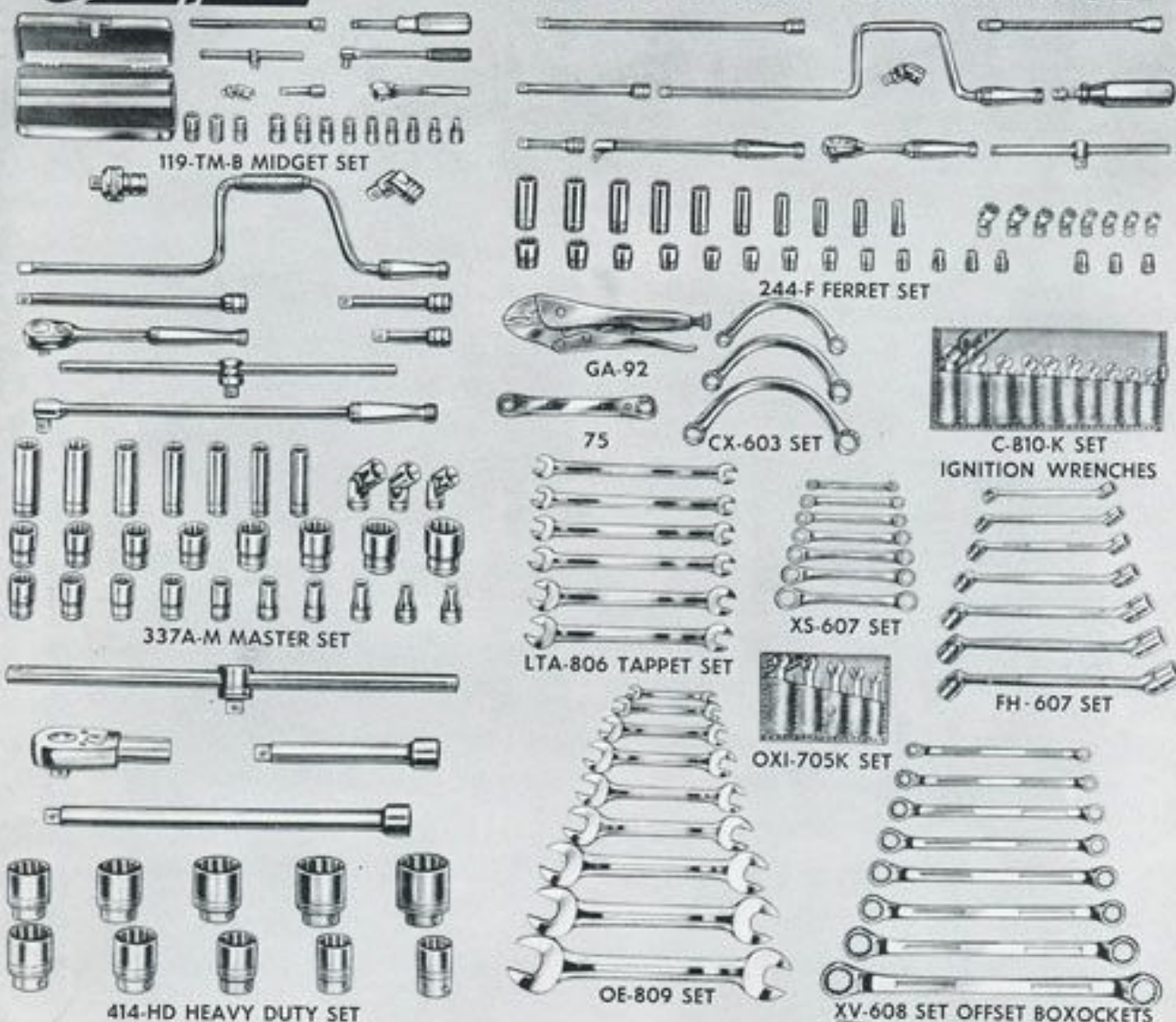
5166-GS Set. Same as above but without the chest.

Contents of 5166-GS-B Set

| Stock No. | DESCRIPTION |
|-----------|---|
| 113-TM-B | Midget Set, See page 110 |
| 244-F | "Ferret" Set, See page 107 |
| 323-M | Master Supreme Set, See page 102 |
| XV-608 | "Boxsocket" Set (3/16" to 1 1/4" sizes) |
| XS-607 | Dwarf "Boxsocket" Set (3/16" to 1/2" sizes) |
| OE-809A | Open End Wrench Set (1/2" to 1" sizes) |
| LTA-806 | Tappet Wrench Set (3/8" to 1 1/2" sizes) |
| C-810 | Ignition Wrench Set (3/8" to 1 1/2" sizes) |
| RGS-60 | Screw Driver Set (six drivers) |
| SD-145 | Spark Test Screw Driver |
| GA-12 | Screw Starter |
| SDP-50 | Phillips Screw Driver Set (five drivers) |
| SCP-160 | Chisel and Punch Set, See page 71 |
| 1650 | Pry Bar |
| 2/0 | 4 oz. Ball Peen Hammer |
| 5/0 | 12 oz. Ball Peen Hammer |

| Stock No. | DESCRIPTION |
|-----------|----------------------|
| 92-PH | 1 lb. Plastic Hammer |
| 334 | Feeler Gauge |
| 309-W | Spark Plug Gauge |
| HS-9 | Back Saw Frame |
| CS-1 | Carbon Scraper |
| AC-58B | Wire Brush |
| CF-49 | Valve Lifter |
| CF-7A | Valve Key Replacer |
| VL-30 | Valve Spring Comp. |
| 50 | Ignition Plugs |
| 127 | Gripping Plier |
| 196 | Needle Nose Plier |
| 87 | Diagonal Cutter |
| 208 | Battery Plier |
| KR-56 | Metal Tool Chest |

Snap-on ALL-PURPOSE NUT TURNING SET



5171-GS-B MAINTENANCE WRENCH SET

Ever think of this—that almost every machinery maintenance job starts and ends with wrench work? When the right kind and size of wrench for any job is ready for immediate use, machinery repair and adjustment time is handled more safely . . . speedily . . . easily and costly "down-time" held to a minimum. This assortment of 171 tools contains every standard wrench size from $\frac{1}{16}$ " to $1\frac{1}{4}$ " in types to handle every conceivable nut turning situation. The socket wrenches are segregated into four groups having $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", and $\frac{3}{4}$ " square drive. The 5171-GS-B set also includes the very popular KR-56 SNAP-ON tool chest shown at right.

5171-GS Set. Same as above but without the tool chest.

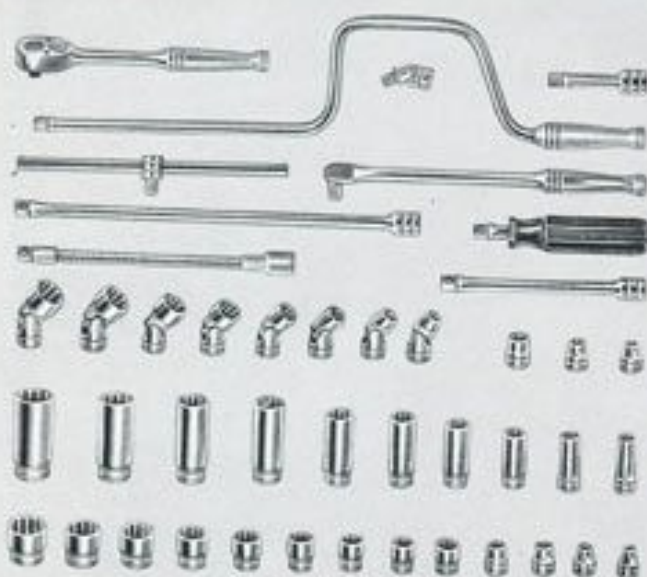
Contents of 5171-GS-B Set

| Stock No. | DESCRIPTION | Stock No. | DESCRIPTION |
|-----------|--|-----------|--|
| 119-TM-B | Midget Set in Box. See page 110 | FH-607 | Flex-Head Wrench Set ($\frac{1}{4}$ " to $\frac{1}{2}$ ") |
| 244-F | "Ferret" Set. See page 107 | 75 | Rateletting "Boxsocket" ($\frac{1}{8}$ " & $\frac{1}{4}$ ") |
| 337A-M | Master Set. See page 101 | LTA-806 | Tappet Wrench Set ($\frac{1}{8}$ " to $\frac{1}{4}$ ") |
| 414-HD | Heavy Duty Set. See page 100 | OXI-705-K | Midget Combination Set in Kit ($\frac{1}{16}$ " to $\frac{1}{2}$ ") |
| XV-608 | "Boxsocket" Set, ($\frac{1}{8}$ " to $\frac{1}{4}$ ") | C-810-K | Ignition Wrench Set in Kit ($\frac{1}{4}$ " to $\frac{1}{2}$ ") |
| XS-607 | Dwarf "Boxsocket" Set, ($\frac{1}{8}$ " to $\frac{1}{4}$ ") | GA-92 | Vise-Grip Wrench |
| OE-809 | Open End Set, ($\frac{1}{8}$ " to $\frac{1}{4}$ ") | KR-56 | Metal Tool Chest |
| CX-603 | Half Moon "Boxsocket" Set, ($\frac{1}{8}$ " to $\frac{1}{4}$ ") | | |



This Chest and its companion Roll-Cab are described in detail on page seventy-six.

SET OF 242 *Snap-on* WRENCHES and



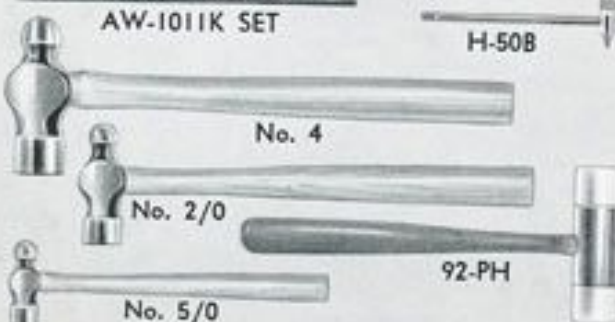
244-F FERRET SET



424-HD HEAVY DUTY SET



AW-1011K SET



No. 4

No. 2/0

No. 5/0

H-50B

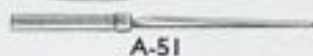
92-PH



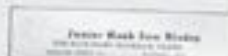
368A-M MASTER SET



HS-9



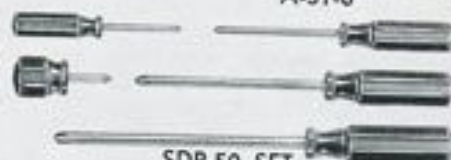
A-51



A-51-6



GA-92

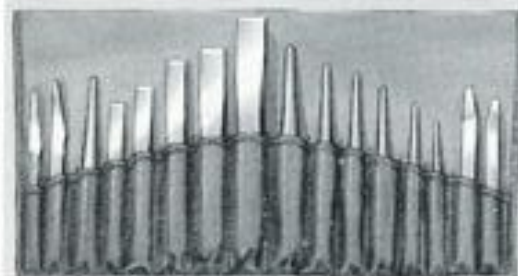


SDP-50 SET



SDS-130 SET

TOOLS FOR INDUSTRIAL MAINTENANCE WORK



SCP-160-K SET



PL-70A SET



CX-603 SET



CM-12



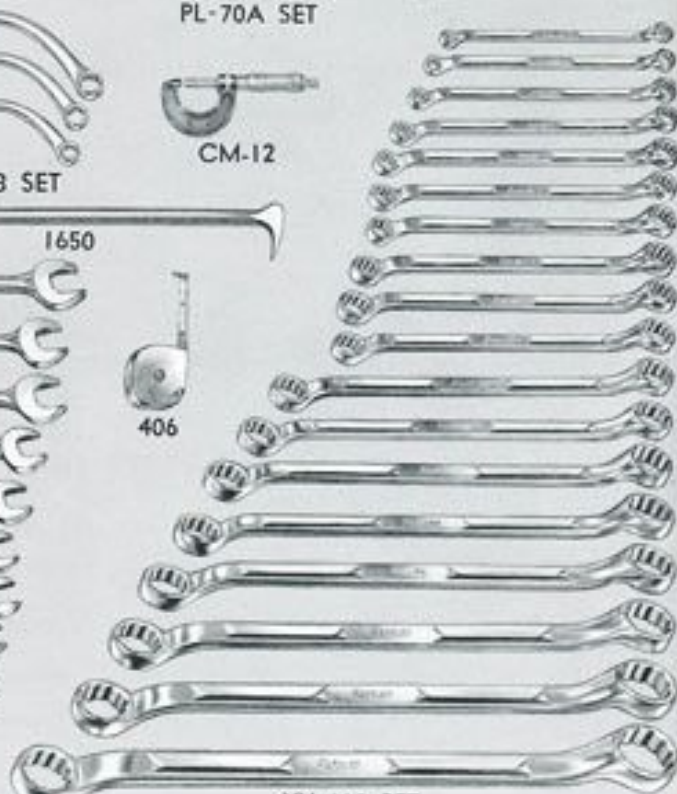
OE-821 SET



1650



406



XV-618 SET

5242-GS INDUSTRIAL SET

The right tool . . . at the right place . . . at the right time—that is one of the biggest factors which can contribute to faster, more accurate machinery maintenance or repair. Here is a selection of wrenches and hand tools which provides every standard wrench size from 1/4" up to 2 3/4" and wrench types to suit any given situation. Complete descriptions of the various groups and units comprising this set will be found on the pages listed below.

Suitable Cabinets for This Set

The time saving way to operate is to use a "Rolla-Bench" or "Roll-Cab" which will transport the complete tool equipment from crib to job. It puts all the tools right where they are needed . . . eliminates time wasting "tool trips" and increases the efficiency of maintenance departments. Color illustrations and complete descriptions of SNAP-ON "Roll-Cabs," "Rolla-Benches" and tool chests are found on pages 72 to 77.



KR-61 Chest

Giant size for quick location of tools. A big time saver. Complete story telling its many features on page 73.



KR-361 Combination

Tremendous amount of storage space for the alert mechanic. Fully described and shown in color on page 73.



KR-300B Rolla-Bench

Saves countless hours of a mechanic's time. You'll find it fully described and illustrated in color on page 73.

CONTENTS OF 5242-GS INDUSTRIAL MAINTENANCE SET—PAGES 92-93

5242-GS Universal Tool Set. Tools only.
5242-GS-B Set. Complete in the KR-61 Super Chest.
5242-GS-BA Set. Complete in KR-361 Super Chest and Roll-Cab Combination.
5242-GS-BB Set. Complete in KR-300B Rolla-Bench.

| Stock No. | Description |
|-----------|-------------------------------|
| 4 | 2 lb. Ball Peen Hammer |
| 92-PH | 1 lb. Plastic Tip Hammer |
| A-51 | Junior Hack Saw Frame |
| A-51-6 | Package of 12 Blades for A-51 |
| HS-9 | Standard Hack Saw Frame |
| CM-12 | Micrometer (zero to 1" gap) |

| Stock No. | Description |
|-----------|---|
| GA-92 | 16" Vice-Grip Wrench |
| 406 | Steel Tape (6 ft. length) |
| 244-F | "Ferret" Socket Wrench Set (3/8" sq. drive). See page 107 |
| 368A-M | Master Socket Wrench Set (3/4" sq. drive). See page 101 |
| 424-HD | Heavy Duty Socket Wrench Set (3/4" sq. drive). See page 100 |
| OE-821 | Open End Wrench Set (1/4" to 1 3/4" sizes) |
| XV-618 | "Boxsocket" Set (3/8" to 1 3/4" sizes) |
| CX-603 | Half Moon "Boxsocket" Set (1/4" to 1 3/4" sizes) |

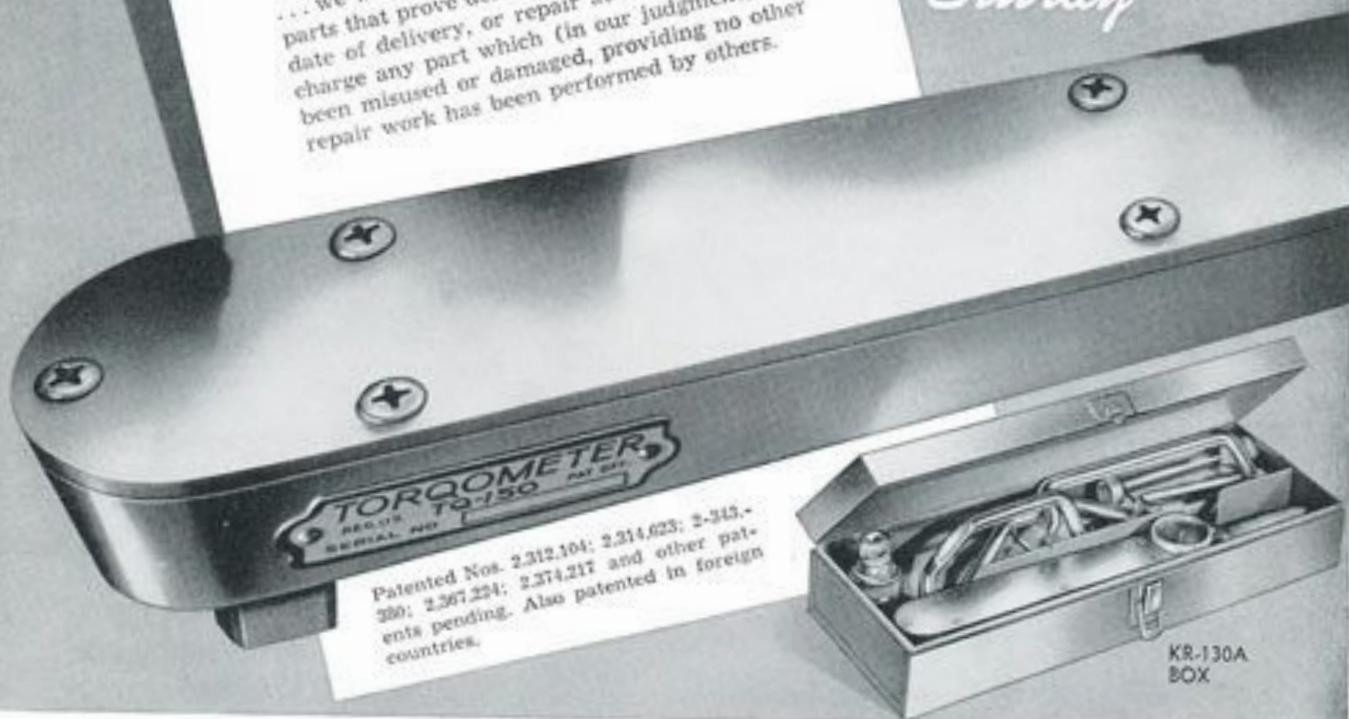
| Stock No. | Description |
|-----------|---|
| AW-1011-K | Hex Head Wrench Set (3/16" to 3/4") |
| SDS-130 | Standard Tip Screw Driver Set (13 Drivers) |
| SDP-50 | Phillips Screw Driver Set (5 Drivers) |
| H-50B | Offset Hammer Head Screw Driver |
| SCP-160-K | Chisel & Punch Set (16 tools). See page 71 |
| 1650 | Pry Bar and Lining-up Punch |
| PL-70A | Set of seven Pliers. Nos. 9C, 50, 137, 65, 87, 190, 208 |
| 2/0 | 12 oz. Ball Peen Hammer |
| 5/0 | 4 oz. Ball Peen Hammer |

WHY THE *Snap-on* TORQOMETER IS THE

*Accurate
Dependable
Sturdy*

BACKED BY THIS GUARANTEE

SNAP-ON "Torquometers" are thoroughly tested and inspected before leaving the factory and warranted to be in perfect working condition . . . we will repair or replace free of charge any parts that prove defective within 90 days from date of delivery, or repair at nominal service charge any part which (in our judgment) has been misused or damaged, providing no other repair work has been performed by others.



THESE SUPER FEATURES MAKE IT AMERICA'S FINEST

A SNAP-ON "Torqometer" is truly a precision gauge. Properly used to tighten bolts and studs to pre-determined tensions it will help eliminate faulty conditions and undue wear caused by mechanical distortion.

Even veteran mechanics cannot be expected to guess correct bolt tensions . . . or estimate even close to uniform accuracy where a series of bolts must be tightened. But with a SNAP-ON "Torqometer" the most inexperienced worker can hit the specified bolt torque every time . . . right to the correct inch or foot pound . . . and do it swiftly and confidently. For accuracy there is no substitute for a "Torqometer" for uniform tightening of threaded parts.

It is simple to use—set the adjustable dial at the bolt tension required and tighten till the pointer reaches zero or until the bulb on a flash model lights.

Slender design permits use of the tool in very close working quarters and, when used with a ratchet adaptor, the "Torqometer" will easily handle jobs where handle movement is limited.

The square drive torque plug is welded to the steel top plate which also supports the dial mechanism and the thick polished aluminum housing provides a protective cover.

● **Torque Measuring Principle**—SNAP-ON "Torquometers" determine bolt tension by measuring the amount of twist (torque) developed in a specially heat treated alloy steel plug within the instrument as bolt turning pressure is applied. This torque is transmitted through a floating beam to the dial and no springs are used to measure the tension which is applied to the bolt.

● **Friction-Free Operation**—The floating connecting beam between the torque plug and the dial mechanism has no bearing points and consequently no friction drag. This floating beam construction together with the watch-like precision of the dial mechanism renders the "Torqometer" practically free of friction.

● **Extreme Sensitiveness**—The torque applied to the bolt is amplified approximately 500 times on the dial. This permits extreme accuracy in tensioning bolts to exact requirements.

● **Shock-Proof Dial Mechanism**—With indicating hand that may be pre-set to any desired position on the clear view dial. The hub of the pointer contains a clutch which allows the stem to turn within the hub if a sudden impact occurs (dirty or rusty threads can cause such impacts and should be cleaned

before using). This safety clutch protects the dial mechanism from shock damage.

● **Built-in Safety Factors**—Constructed to withstand an overload beyond the dial capacity of each model far greater than the average mechanic is apt to apply.

● **For Right, and Left Hand Threads**—Dial pointer works both ways on the dial.

● **White Calibrations**—Against a black background make it very easy to read the "Torqometer" dial.

● **Consistent Readings**—The accuracy of the "Torqometer" is not affected by the way it is held. Pull on the end of the handle or close to the dial and the reading remains the same.

● **Wide Range of Sizes**—With capacities from 0 to 15 inch pounds upwards to 4,000 foot pounds. This range allows for use in any phase of assembly or maintenance service.

● **Flashlight Models**—For use in dark and hard-to-get-at locations.

● **Balanced Weight**—Well-balanced streamlined design and light weight aluminum housings contribute to ease of operation.

FINEST TOOL FOR ACCURATE BOLT TENSION

the right tension . . . as easy as telling time



Snap-on BUILDS THE RIGHT SIZE "TORQOMETER" FOR EVERY KIND OF JOB

| Type | STANDARD MODELS | FLASH MODELS | Square Drive | Dial Calibrated | Tool Depth | Tool Width | Tool Length | Length with handle |
|------|-----------------|--------------|--------------|--------------------|------------|------------|-------------|--------------------|
| A | TQ-1 | | 1/4" | 0-15 Inch Pounds | 1 1/8" | 1 1/2" | 9" | |
| A | TQ-3 | | 1/4" | 0-30 Inch Pounds | 1 1/8" | 1 1/2" | 9" | |
| A | TQ-6 | | 1/4" | 0-75 Inch Pounds | 1 1/8" | 1 1/2" | 9" | |
| A | TQ-12B | TQ-12BL | 1/2" | 0-150 Inch Pounds | 1 1/8" | 1 1/2" | 9" | |
| A | TQ-50A | TQ-50AL | 3/8" | 0-600 Inch Pounds | 1 1/8" | 1 1/2" | 13 1/4" | |
| B | TQ-50AF | | 3/8" | 0- 50 Foot Pounds | 1 1/8" | 1 1/2" | 13 1/4" | |
| B | TQ-51A | | 3/8" | 0-600 Inch Pounds | 1 1/8" | 1 1/2" | 13 1/4" | |
| B | TQ-150 | TQ-150L | 1/2" | 0-150 Foot Pounds | 1 1/8" | 1 1/2" | 16 1/2" | |
| C | TQ-151 | | 1/2" | 0-1800 Inch Pounds | 1 1/8" | 1 1/2" | 16 1/2" | |
| C | TQ-250 | TQ-250L | 3/4" | 0- 250 Foot Pounds | 1 1/8" | 2" | 24" | |
| C | TQ-352A | TQ-352AL | 3/4" | 0- 350 Foot Pounds | 1 1/8" | 2 1/4" | 24" | 32" |
| D | TQ-602A | TQ-602AL | 3/4" | 0- 600 Foot Pounds | 1 1/8" | 2 1/4" | 24" | 42" |
| D | | TQ-1003AL | 1" | 0-1000 Foot Pounds | 2" | 2 1/4" | 25 1/4" | 66 1/2" |
| D | | TQ-2003AL | 1 1/4" | 0-2000 Foot Pounds | 2 1/4" | 3 1/8" | 26 1/2" | 79" |
| D | | TQ-2803TL | 1 1/4" | 0-2000 Foot Pounds | 5 1/4" | 4 1/8" | | 64" |
| D | | TQ-3005L | 1 1/2" | 0-3000 Foot Pounds | 6" | 5 1/4" | | 138" |
| D | | TQ-3005TL | 1 1/2" | 0-3000 Foot Pounds | 6" | 5 1/4" | | 138" |
| D | | TQ-4005TL | 1 1/2" | 0-4000 Foot Pounds | 6" | 5 1/4" | | 138" |

SPECIAL "TORQOMETER" CASES

KR-135 Metal Case. Holds the TQ-250, TQ-250L, TQ-352A, TQ-352AL, TQ-602A or TQ-602AL. Made of heavy gauge steel with spot welded construction and has two sturdy snap fasteners. To protect the "Torqometer" two pieces of heavy felt are attached to the inside of the lid so that the tool cannot move around when the lid is closed. A handle is attached to the top for carrying. Case is 25 1/2" x 4 1/2" x 3 3/8" deep. Weight 5 lbs-5 ozs. Red enamel finish.

KR-130A Metal Box. Shown on page 94. This sturdy metal box is made expressly for the TQ-150 and TQ-150L and has additional space for the 67-B Ratchet Adaptor (page 102) as well as other tools. Made of heavy gauge steel, spot welded and finished in red enamel. 17 1/8" long, 6 1/8" wide, 3 1/2" high.



KR-135
"Torqometer" Case

EXTRA HEAVY FOR TOUGH JOBS



***Snap-on* EXTRA HEAVY DUTY LOXOCKET® WRENCHES**

*Trade Mark (Lic. Reissue Pat. 19,287)

1" Square Drive

The "Loxocket" principle makes any combination of these units as safe as a one-piece wrench . . . they lock together securely and will not accidentally come apart . . . a convenient release button allows you to interchange sockets swiftly and easily. Here are tools with the compact power of a prize-fighter's fist . . . with tremendous power and leverage to accomplish more work easier and with less fatigue . . . built to break loose those big rusted-on nuts and bolts or to pull them up to the tightest degree. We recommend this equipment for speeding up the heaviest nut-turning work in truck or bus shops—installation and maintenance on marine and mine machinery—all power plants and transmitting machinery—locomotive shops, etc. Take the worry out of break-downs by using SNAP-ON wrenches. Pitch into every repair job with confidence that it will be finished at a definite time . . . and in the shortest time. Units are individually machined from finest alloy steel and are carefully heat-treated for maximum strength.

EXTRA HEAVY DUTY HEXAGON "LOXOCKETS"

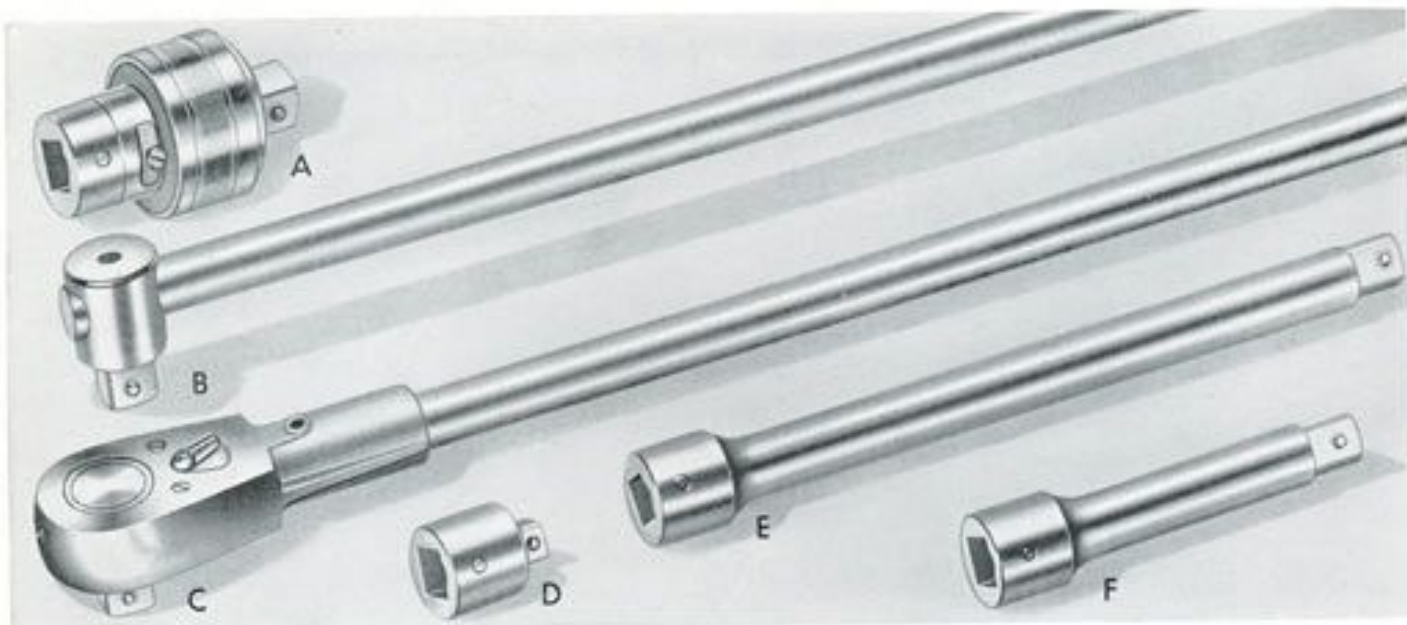
Fit companions to the Extra Heavy Duty Handles are the "Loxockets" that work with them . . . 11 double broached and 6 single broached sockets of precision machined alloy steel, ranging in size from 1 1/4" to 3 1/4". Keep going with these tools that make small work of the big tie-ups—give you adequate wrench performance at all times.



| Wrench Size | Stock No. | Bolt Clearance Depth | O. D. Socket End | O. D. Drive End | Overall Length |
|-------------|-----------|----------------------|------------------|-----------------|----------------|
| 1 1/4" | LDH-483 | 1 1/2" | 2 1/2" | 2" | 21 1/2" |
| 1 1/2" | LDH-483 | 1 3/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 3/8" | LDH-523 | 1 3/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 1/2" | LDH-543 | 1 3/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 3/4" | LDH-563 | 1 3/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 3/8" | LDH-583 | 1 3/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 3/4" | LDH-603 | 2 1/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 1 3/8" | LDH-643 | 2 1/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 2 1/4" | LDH-683 | 2 1/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 2 1/2" | LDH-703 | 2 1/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 2 3/4" | LDH-723 | 2 1/4" | 2 3/4" | 2 1/4" | 21 1/2" |
| 2 1/4" | L-763 | 2 1/4" | 3 3/4" | 2 1/4" | 31 1/2" |
| 2 1/2" | L-803 | 3" | 3 1/2" | 2 1/4" | 41 1/2" |
| 2 3/4" | L-843 | 3 1/8" | 3 1/2" | 2 1/4" | 41 1/2" |
| 2 3/4" | L-883 | 3 1/8" | 3 1/2" | 2 1/4" | 41 1/2" |
| 2 3/4" | L-943 | 3 1/8" | 4 1/8" | 2 1/4" | 41 1/2" |
| 3 1/4" | L-1003 | 3 1/8" | 4 1/8" | 2 1/4" | 41 1/2" |

Larger Sizes Available on Special Order.

517-LDH Set. Consists of one each of above sockets.



Snap-on EXTRA HEAVY DUTY "LOXOCKET" HANDLES (1" Square Drive)

A L-673 Ratchet Adaptor. (Patent No. 2,020,883.) Here is a new addition to SNAP-ON's Extra Heavy Duty series that will prove a real time-saver. It converts any combination of handle, extension and socket into a 44 tooth, reverse action ratcheting tool and will make your present set twice as useful. Outside diameter $3\frac{1}{4}$ ", overall length 5".

B L-53 Extra Heavy Duty Sliding Bar. Thirty full inches of tremendous leverage when this tool is used as an Offset Handle. The head can be used in any position on the bar or as a tee wrench in combination with extension bars. Handle is same as used on L-73 Ratchet.

L-53A Sliding Bar Head only. $3\frac{1}{4}$ " deep.

C L-73 Ratchet and Detachable Handle. Rugged strength, tremendous leverage, and high speed ratchet action combine to chase away the nightmare of costly delays and shutdowns.

This tool is recommended without hesitation for the toughest kind of work. The detachable hammer forged head and all working parts are accurately machined from special alloy steels, heat treated to give the utmost strength and durability. Hardened bearings in the head provide resistance to wear. Ratchet action requires only a 20° handle movement. Overall length 35".

L-73A Ratchet Head only. $7\frac{1}{16}$ " long, $1\frac{1}{16}$ " thick

L-53H Handle only. 30" long, $1\frac{1}{4}$ " dia.

D Handle and Socket Adaptors. These two adaptors enable you to interchange your Extra Heavy Duty units (1" square drive) with Heavy Duty ($\frac{3}{4}$ " square drive) units.

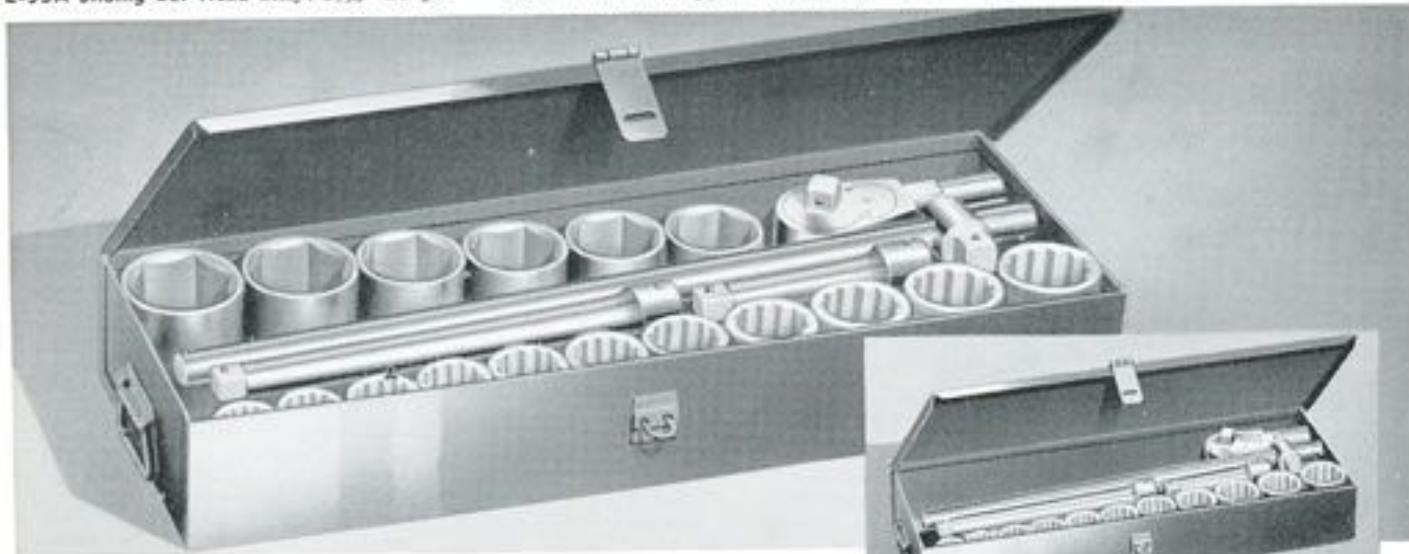
★LA-72 Adaptor. $\frac{3}{4}$ " drive female end—1" drive male end.

★LA-124 Adaptor. 1" drive female end— $\frac{3}{4}$ " drive male end.

Extra Heavy Duty Extension Bars. These extensions give you the valuable adaptability of the Ratchet or Sliding Bar to nuts or bolts down in deep holes or crevices where other tools will not reach, or where obstructions interfere.

E L-123 Extension Bar 16" long.

F L-63 Extension Bar 8" long.



EXTRA HEAVY DUTY STANDARD SET — 21 Tools

521-EHD-B Extra Heavy Duty Standard Set. Includes all 17 Hexagon "Loxockets" listed on opposite page and provides a wrench range of $1\frac{1}{16}$ " up to and including $3\frac{1}{2}$ ". Also L-73A Ratchet Head, Sliding Bar L-53 and two Extension Bars L-63 and L-123. All neatly packed in a sturdy metal box KR-238—made of heavy gauge steel—closely spot welded for durability and strength. Lid is fitted with four butt hinges and a strong padlock hasp. Has heavy carrying handles on each end. Finished in baked-on red enamel. Size $31\frac{1}{2}$ " long, $11\frac{1}{4}$ " wide and $5\frac{1}{4}$ " deep.

521-EHD Set. Same set as above but tools only.

E. H. D. Basic Set — 15 Tools

515-EHD-B Extra Heavy Duty Basic Set. Included are 11 powerful Hexagon "Loxockets" LDH-463, 483, 523, 543, 563, 583, 603, 643, 683, 703, and 723; the L-73A Ratchet Head, a 30" Sliding Bar L-53 and two extension bars L-63 and L-123. This set, with wrench sizes of $1\frac{1}{16}$ " to $2\frac{1}{4}$ " will handle a wide range of big nut turning jobs. Set also includes KR-238 Metal Box described at left.

515-EHD Set. Above set. Tools only.

HEAVY DUTY LOXOCKETS FOR TOUGH



Snap-on H.D. "LOXOCKETS" — 3/4" Square Drive STANDARD DOUBLE HEX SERIES

*Trade Mark (Lic. Reissue Pat. 19,257)

When a tough nut ties up your shop, minutes lost add up to dollars lost... you lose money every minute any machine is laid up for repairs or servicing. The trick is to get them OUT... quick. It's no trick at all when mechanics are equipped with SNAP-ON Heavy Duty "Loxocket" Wrenches... that's why so many Managers and Superintendents make sure that these tools are standard equipment in their shops.

Not only do they speed up your work but on top of that the special locking device on all units puts "Safety" into the hands of every operator and mechanic. This locking device is essentially the same as the standard friction grip except that the ball is replaced with a pin. This pin snaps into the locking hole in the socket and will not release by pulling like the friction grip. A small button is incorporated in each socket which, when depressed, contacts the pin in the handle, releasing it from the socket. Interchanging of units is fast... simple... easy, yet you have the advantage of a one piece tool.

SNAP-ON "Loxockets" are machined from exceptionally high quality bar steel and held to very close tolerances. Hot broaching gives smooth, accurate openings and with no rough edges or chips at the bottom to collect dirt etc. Careful heat-treating of the "Loxocket" assures the utmost in strength with the exceptional toughness necessary for all heavy duty operations.

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|-----------|---------|
| | | | Socket End | Drive End | |
| 1/2" | LDH-242 | 1 1/8" | 1 1/8" | 1 1/8" | 4 1/2" |
| 9/16" | LDH-282 | 1 1/4" | 1 1/4" | 1 1/4" | 4 7/8" |
| 5/8" | LDH-302 | 1 3/8" | 1 3/8" | 1 3/8" | 5 1/4" |
| 3/4" | LDH-312 | 1 3/4" | 1 3/4" | 1 3/4" | 5 7/8" |
| 7/8" | LDH-322 | 1 7/8" | 1 7/8" | 1 7/8" | 6 1/4" |
| 1" | LDH-342 | 2" | 2" | 2" | 6 7/8" |
| 1 1/8" | LDH-362 | 2 1/8" | 2 1/8" | 2 1/8" | 7 1/4" |
| 1 1/4" | LDH-382 | 2 1/4" | 2 1/4" | 2 1/4" | 7 7/8" |
| 1 3/8" | LDH-402 | 2 3/8" | 2 3/8" | 2 3/8" | 8 1/4" |
| 1 1/2" | LDH-422A | 2 1/2" | 2 1/2" | 2 1/2" | 8 7/8" |
| 1 3/4" | LDH-442 | 2 3/4" | 2 3/4" | 2 3/4" | 9 1/4" |
| 1 7/8" | LDH-462 | 2 7/8" | 2 7/8" | 2 7/8" | 9 7/8" |
| 2" | LDH-482 | 3" | 3" | 3" | 10 1/4" |
| 2 1/8" | LDH-502 | 3 1/8" | 3 1/8" | 3 1/8" | 10 7/8" |
| 2 1/4" | LDH-522 | 3 1/4" | 3 1/4" | 3 1/4" | 11 1/4" |
| 2 3/8" | LDH-542 | 3 3/8" | 3 3/8" | 3 3/8" | 11 7/8" |
| 2 1/2" | LDH-562 | 3 1/2" | 3 1/2" | 3 1/2" | 12 1/4" |
| 2 7/8" | LDH-582 | 3 7/8" | 3 7/8" | 3 7/8" | 12 7/8" |
| 3" | LDH-602 | 4" | 4" | 4" | 13 1/4" |
| 3 1/8" | LDH-642 | 4 1/8" | 4 1/8" | 4 1/8" | 13 7/8" |
| 3 1/4" | LDH-682 | 4 1/4" | 4 1/4" | 4 1/4" | 14 1/4" |
| 3 3/8" | LDH-702 | 4 3/8" | 4 3/8" | 4 3/8" | 14 7/8" |
| 3 1/2" | LDH-722 | 4 1/2" | 4 1/2" | 4 1/2" | 15 1/4" |
| 3 7/8" | LDH-762 | 4 7/8" | 4 7/8" | 4 7/8" | 15 7/8" |

424-LDH Set. One each of above sockets.

EXTRA DEEP HEXAGON SERIES

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|-----------|--------|
| | | | Socket End | Drive End | |
| 1/2" | LS-282 | 1 1/8" | 1 1/8" | 1 1/8" | 3 1/2" |
| 9/16" | LS-302 | 1 1/4" | 1 1/4" | 1 1/4" | 3 7/8" |
| 5/8" | LS-322 | 1 3/8" | 1 3/8" | 1 3/8" | 4 1/4" |
| 3/4" | LS-342 | 1 3/4" | 1 3/4" | 1 3/4" | 4 7/8" |
| 7/8" | LS-362 | 1 7/8" | 1 7/8" | 1 7/8" | 5 1/4" |
| 1" | LS-402 | 2" | 2" | 2" | 5 7/8" |
| 1 1/8" | LS-422A | 2 1/8" | 2 1/8" | 2 1/8" | 6 1/4" |
| 1 1/4" | LS-442 | 2 1/4" | 2 1/4" | 2 1/4" | 6 7/8" |
| 1 3/8" | LS-462 | 2 3/8" | 2 3/8" | 2 3/8" | 7 1/4" |
| 1 1/2" | LS-482 | 2 1/2" | 2 1/2" | 2 1/2" | 7 7/8" |
| 1 3/4" | LS-522 | 2 3/4" | 2 3/4" | 2 3/4" | 8 1/4" |

411-LS Set. One each of above sockets.

HEAVY DUTY RATCHET ADAPTOR

(Patent No. 2,620,033)

L-672A Ratchet Adaptor. This new addition to the SNAP-ON Heavy Duty series will prove a real time-saver. It converts any combination of handle, extension and socket into a 44 tooth, reverse action ratcheting tool and will make your present set twice as useful. Outside diameter 2 1/2", overall length 3 1/4".

JOBS IN MILL, FACTORY, OR SHOP



Snap-on HEAVY DUTY "LOXOCKET" HANDLES — 3/4" Square Drive

RATCHET AND DETACHABLE HANDLE

A L-72SH Heavy Duty Ratchet. Complete with the L-72H handle. Powerful leverage to break loose the tightest of those larger nuts and bolts. Efficient, smooth working, reversible ratcheting action that speeds your work. Rugged construction to stand the most strenuous heavy duty work in general maintenance work of all kinds.

Built into this tool is every conceivable improvement of design and construction, making it the most outstanding 3/4" drive heavy duty ratchet ever offered the trade. The detachable handle, locks on to the ratchet head and will not come off until the locking button is released. Overall length, 24".

L-72S Ratchet Head only. Length 6", head thickness 1 1/4". Can be used on either L-72H standard handle or L-72RJ knurled grip handle.

BAR HANDLES

L-72H Handle. This handle is a solid high carbon alloy steel bar and is used with the Heavy Duty Ratchet, Heavy Duty Sliding Bar and Heavy Duty "Nut Spinner." One end is fitted with a locking button for securely attaching to the ratchet and "Nut Spinner" heads. It cannot be detached accidentally. Overall length 20", diameter 1 1/8".

L-72RJ Handle. This solid steel handle is knurled on one end to afford a firmer, more convenient grip for those heavy turning jobs. Fits Ratchet, "Nut Spinner" and Sliding Bar heads illustrated. Locking button at one end locks the handle to the ratchet and "Nut-Spinner" heads to prevent slipping off and causing damage to parts or injuries to the operator. Shank diameter is 1 1/8", overall length 20".

"NUT SPINNER"

C L-112DH Heavy Duty "Nut Spinner." Complete with the L-72H handle. A heavy duty unit that offers the advantages of a "Nut Spinner" handle, an offset handle and an angle head handle all in one. The detachable handle can also be used on the Ratchet Head and Sliding Head, giving a maximum tool efficiency at a minimum cost. The entire unit is built to take those tough jobs which require extra powerful leverage to break loose those large rusted-on nuts and bolts, or tighten them down. Overall length 21 1/2".

L-112D "Nut Spinner" Head only. Head diameter 1 1/8", depth 2 3/4". Can be used on either of the handles listed at left.

SLIDING BAR

D L-52BH Heavy Duty Sliding Bar. Complete with the L-72H handle. Three tools in one—a combination sliding bar handle and offset handle, which the attachment of an extension bar converts to a "T" handle. The head can be purchased separately if you already have the bar handle. A spring and ball device holds the head at any point on the handle. Overall length, 20".

L-52B Sliding Head only. Depth 2 3/8". Can be used on either of the handles listed at left.

EXTENSION BARS

Heavy Duty Extension Bars. Give you the extra reach you need on so many jobs and are probably used on more operations than any other wrench attachment. Used in conjunction with the sliding bar, they convert it for use as a "T" handle. Made in three lengths for your working convenience. Shank diameter is 1 1/8".

E L-122 Extension Bar 16 inch overall length.

F L-62 Extension Bar 8 inch overall length.

G L-32 Extension Bar 3 inch overall length.



HEX HEAD WRENCHES

For use with 3/4" square drive handles. Two-piece construction permits better heat treatment of parts for maximum service. Black finish. See Index pages for listings of other hex head wrenches.

- *LAW-118.....Hex bit 5/16"
- *LA-18-2.....Extra 5/16" bit
- *LAW-120.....Hex bit 3/8"
- *LAW-120-2.....Extra 3/8" bit
- *LAW-124.....Hex bit 7/16"
- *LAW-124-2.....Extra 7/16" bit
- *LAW-118-2A Set Screw for above Hex Head wrenches.

DRAG LINK ADJUSTER

LD-138 Drag Link Adjuster. This heavy duty unit has been made especially for drag link adjusting work on trucks and buses. The short, tapered blade will take the punishment necessary for work of this type. "Loxocket" release button permits fast, easy removal. Overall length of the unit is 2 1/2", outside diameter 1 1/4", tip size 3/4"x1 1/4". Chrome finish.

HANDLE AND SOCKET ADAPTORS

These adaptors allow you to interchange your Heavy Duty (3/4" square drive) wrenches with Master (1/2" square drive), old style Heavy Duty (1/2" square drive), and Extra Heavy Duty (1" square drive) units. Chrome plated finish.

- *LA-12 Adaptor.....1/2" drive to 3/4"
- *LA-62 Adaptor.....3/4" drive to 1/2"
- *LA-52 Adaptor.....3/4" drive to 3/8"
- *LA-32 Adaptor.....3/8" drive to 3/4"
- *LA-72 Adaptor.....3/4" drive to 1"
- *LA-124 Adaptor.....1" drive to 3/4"

UNIVERSAL JOINT

Patent No. 2,196,297

L-82 Heavy Duty Universal Joint. Whenever you must reach in at an angle after a nut, you need the working convenience of a universal joint. This tool worms in and gets those around-the-corner and under-obstruction nuts and bolts.

Machined from finest alloy steel—heat treated and tempered for maximum service under toughest working conditions. Chrome finish. Outside diameter is 1 1/8", overall length 3 1/8".

HEAVY DUTY LOXOCKET SETS FOR 3/4" DRIVE



HEAVY DUTY GENERAL SET—32 TOOLS

432-HD-B Heavy Duty General Set. The right combination of tools means hours of time saved when machines and equipment are down for repair, and the proper selection of tools for production or maintenance work is a profitable investment. Equip your men to do faster, more efficient work with this complete set of heavy duty wrenches. This selection gives a "Loxocket" range of $\frac{1}{8}$ " to $2\frac{1}{2}$ " with hundreds of handle and socket combinations. Units are described on pages 24 and 25. Detachable ratchet handle fits sliding head and nut spinner head. Sturdy KR-226A metal box measures $26\frac{1}{4}$ " x 9" x $3\frac{3}{4}$ ".

432-HD General Set. Above set but tools only.

Contents of 432-HD-B Heavy Duty General Set

| Stock No. | Description | Stock No. | Description |
|-----------|-----------------------------------|-----------|-----------------------------------|
| L-72SH | Ratchet (Complete) | LDH-422A | 1 1/2" Double Hexagon "Loxocket" |
| L-52B | Sliding Bar Head | LDH-442 | 1 3/4" Double Hexagon "Loxocket" |
| L-112D | Nut Spinner Head | LDH-462 | 1 5/8" Double Hexagon "Loxocket" |
| L-62A | Universal Joint | LDH-482 | 1 7/8" Double Hexagon "Loxocket" |
| L-62 | 3" Extension | LDH-502 | 2" Double Hexagon "Loxocket" |
| L-122 | 16" Extension | LDH-522 | 2 1/8" Double Hexagon "Loxocket" |
| LDH-342 | 1 1/8" Double Hexagon "Loxocket" | LDH-542 | 2 3/16" Double Hexagon "Loxocket" |
| LDH-362 | 1 1/4" Double Hexagon "Loxocket" | LDH-562 | 2 1/2" Double Hexagon "Loxocket" |
| LDH-382 | 1 1/2" Double Hexagon "Loxocket" | LDH-582 | 2 7/8" Double Hexagon "Loxocket" |
| LDH-402 | 1 3/4" Double Hexagon "Loxocket" | LDH-602 | 3" Double Hexagon "Loxocket" |
| LDH-422 | 2" Double Hexagon "Loxocket" | LDH-622 | 3 1/8" Double Hexagon "Loxocket" |
| LDH-442 | 2 1/8" Double Hexagon "Loxocket" | LDH-642 | 3 1/4" Double Hexagon "Loxocket" |
| LDH-462 | 2 3/16" Double Hexagon "Loxocket" | LDH-662 | 3 1/2" Double Hexagon "Loxocket" |
| LDH-482 | 2 1/2" Double Hexagon "Loxocket" | LDH-682 | 3 3/4" Double Hexagon "Loxocket" |
| LDH-502 | 2 7/8" Double Hexagon "Loxocket" | LDH-702 | 4" Double Hexagon "Loxocket" |
| LDH-522 | 3" Double Hexagon "Loxocket" | LDH-722 | 4 1/8" Double Hexagon "Loxocket" |
| LDH-542 | 3 1/8" Double Hexagon "Loxocket" | LDH-742 | 4 1/4" Double Hexagon "Loxocket" |
| LDH-562 | 3 1/4" Double Hexagon "Loxocket" | LDH-762 | 4 1/2" Double Hexagon "Loxocket" |
| LDH-582 | 3 3/8" Double Hexagon "Loxocket" | KR-226A | Metal Box |
| LDH-602 | 3 1/2" Double Hexagon "Loxocket" | | |



H. D. BASIC SET—10 Tools

410-HD-B Heavy Duty Basic Set. Selected to provide maximum utility at minimum cost for the mechanic building up his tool equipment or who has only occasional need for these powerful wrenches. "Loxocket" sizes $1\frac{1}{8}$ " to $1\frac{3}{4}$ " handle most of heavier garage work. Set includes KR-224 red enamel metal box, size $22\frac{1}{4}$ " x $8\frac{3}{4}$ " x $3\frac{1}{4}$ ".

Handles: L-52BH Sliding Bar and L-62 3" Extension.

Sockets: LDH-342, LDH-362, LDH-402, LDH-442, LDH-462, LDH-482, LDH-522, and LDH-562.

410-HD Set. Above set tools only.

H. D. STANDARD SET—14 Tools

414-HD-B Heavy Duty Standard Set. Men working in fleet shops are enthusiastic about the power and safe operation provided by this set of Heavy Duty Units. The 10 "Loxockets" provide a size range of $1\frac{1}{8}$ " to $1\frac{3}{4}$ ", the sliding bar handle also fits the ratchet head. Red enameled KR-224 metal box measures $22\frac{1}{4}$ " x $8\frac{3}{4}$ " x $3\frac{1}{4}$ ".

Handles: L-72SH Ratchet Head, L-52BH Sliding Bar, L-62 3" Extension and L-122 16" Extension.

Sockets: LDH-342, LDH-362, LDH-402, LDH-442, LDH-462, LDH-482, LDH-522, LDH-562, LDH-582, LDH-602.

414-HD Set. Above set tools only.

HEAVY DUTY UTILITY SET—24 Tools

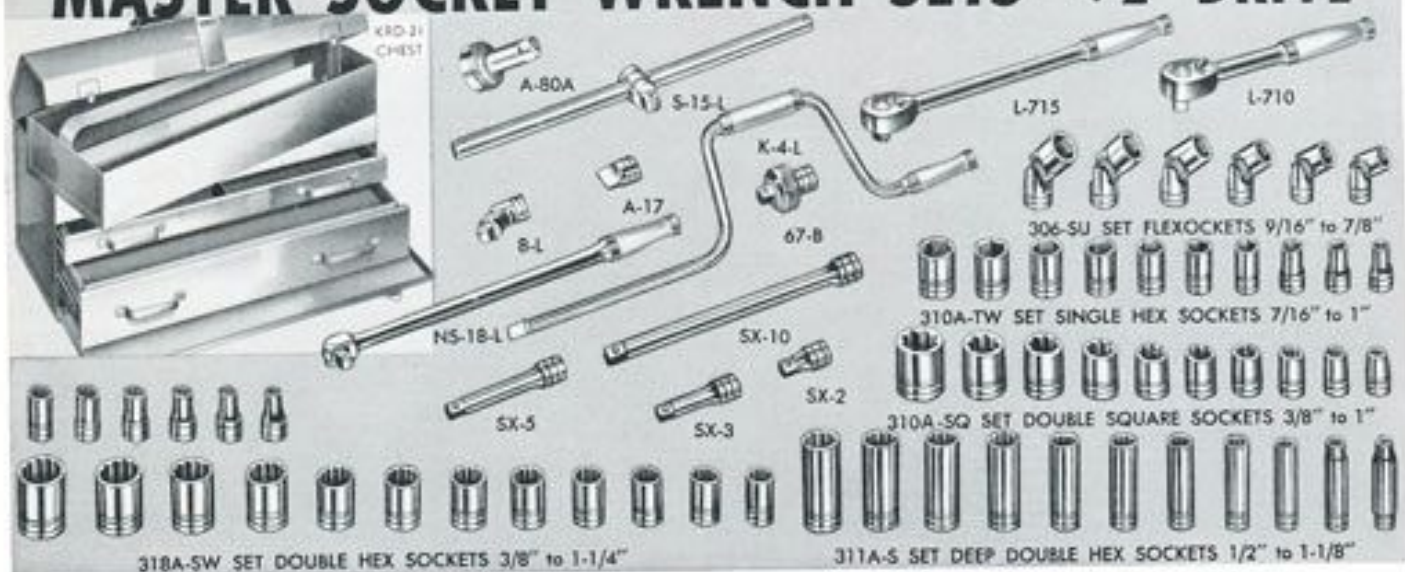
424-HD-B Heavy Duty Utility Set. A practical selection of wrenches for factory and building maintenance, medium diesel and stationary engine assembly and service, fleet shops, etc. Detachable handle fits ratchet, nut-spinner and sliding head, 18 "Loxockets" provide sizes $1\frac{1}{8}$ " to 2". Red enameled metal box KR-226A measures $26\frac{1}{4}$ " x 9" x $3\frac{3}{4}$ ".

Handles: L-72SH Ratchet, L-52B Sliding Bar, L-112D Nut Spinner Head, Ext. Bars, L-32 3" long, L-62 8" long, L-122 16" long.

Sockets: LDH-302, LDH-312, LDH-322, LDH-342, LDH-362, LDH-382, LDH-402, LDH-422A, LDH-442, LDH-462, LDH-482, LDH-502, LDH-522, LDH-542, LDH-562, LDH-582, LDH-602, and LDH-642.

424-HD Set. Above set but tools only.

MASTER SOCKET WRENCH SETS—1/2" DRIVE



368A-M-B MASTER GENERAL SET IN KR-21 MECHANIKIT—68 TOOLS

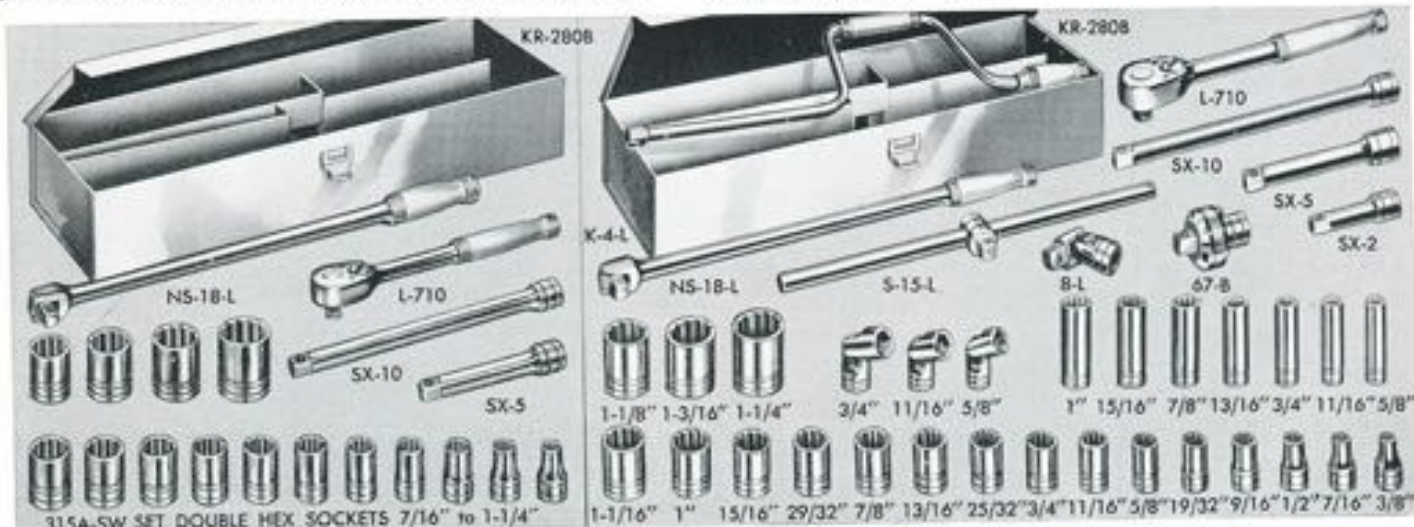
Contents of 368A-M-B Set

368A-M-B Master General Set. Here is our most complete set of Master (1/2" square drive) wrenches. Assembled for the mechanic who wants a full range of socket sizes and types together with a wide selection of handle equipment. This versatile assortment of matched units contributes speed and convenience to the overall proficiency of top notch mechanics in every type of service and maintenance work. Treat yourself to greater working ease with this outstanding set of SNAP-ON quality wrenches.

The KR-21 Mechanikit shown above is the ideal container for these tools... its tote-tray and drawers are partitioned for orderly tool arrangements and safekeeping.

| Stock No. | Description | Stock No. | Description |
|-----------|-----------------------------|-----------|-----------------------------------|
| NS-18L | Master Nut Spinner 18" | SX-10 | Master Extension Bar 10" |
| S-15L | Master Sliding Bar 15" | A-17 | Master Drag Link Adjuster |
| K-4L | Master Speeder 19 1/2" | A-80A | Master Stud Remover |
| L-710 | Master Ratchet Wrench 10" | 318A-SW | Master Double Hex Socket Set |
| L-715 | Master Ratchet Wrench 13" | 311A-S | Master Deep Double Hex Socket Set |
| 67B | Master Ratchet Adapter | 310A-TW | Master Single Hex Socket Set |
| 8L | Master Universal Joint | 310A-SQ | Master Square Socket Set |
| SX-2 | Master Extension Bar 2" | 306-SU | Master Flexsocket Set |
| SX-3 | Master Extension Bar 3 1/2" | 100-SU | Master Flexsocket Set |
| SX-5 | Master Extension Bar 5" | KR-21 | Mechanikit (Page 24) |

368A-M Master General Set. Above set without the Mechanikit.



319A-M-B MASTER BASIC SET—19 Tools

319A-M-B Master Basic Set. Pictured above is a basic selection of 1/2" square drive SNAP-ON matched unit wrenches. It's the ideal starter set for the alert mechanic and gives him the most useful tools possible in a small set. The right tools for the job makes your work easier. Other "matched units" can be added as the need arises. The KR-280B metal box shown, conveniently holds all the units with room for additional tools. Keeps tools at hand for immediate use. Box has carrying handle on the lid. It measures 20" x 6 1/2" x 3 3/4" high and is finished in red enamel. **319A-M Master Basic Set.** Tools only.

| Stock No. | Description |
|-----------|------------------------------|
| NS-18L | Master "Nut Spinner" 18" |
| L-710 | Master Ratchet Wrench |
| SX-5 | Master Ext. Bar 5" |
| SX-10 | Master Ext. Bar 10" |
| 315A-SW | Master Double Hex Socket Set |
| KR-280B | Box, Red Enamel Finish |

337A-M-B MASTER UTILITY SET—37 Tools

337A-M-B Master Utility Set. Set includes 18 double hex sockets in sizes 3/4" to 1 1/4", 7 popular sizes of deep hex sockets for spark plug work and jobs where bolts protrude, and 3 hex flexsockets. The nine handles and attachments provide complete versatility of use.

Rid your kit of obsolete, time-wasting, "misfits" and treat yourself to greater working ease with this set of SNAP-ON matched units. Set includes KR-280B metal box which was specially designed for these tools. Box has carrying handle on the lid and measures 20" x 6 1/2" x 3 3/4" high. Red enamel finish.

337A-M Master Utility Set. Same set as above but tools only.

| Stock No. | Description |
|-----------|--|
| NS-18L | Master "Nut Spinner"—18" long |
| S-15L | Master Sliding Bar—15" long |
| K-4L | Master Speeder—19 1/2" long |
| L-710 | Master Ratchet Wrench |
| 67B | Master Ratchet Adapter Wrench |
| SX-10 | Master Extension Bar—10" long |
| SX-5 | Master Extension Bar—5" long |
| SX-2 | Master Extension Bar—2" long |
| 8L | Master Universal Joint |
| 318A-SW | Master Double Hexagon Socket Set |
| 311A-S | Master Deep Double Hex. Socket Set |
| 306-SU | Master "Flexsocket"—1 1/2" wrench size |
| 302-SU | Master "Flexsocket"—1 1/4" wrench size |
| 300-SU | Master "Flexsocket"—1 1/2" wrench size |
| KR-280B | Metal Box, Red Enamel Finish |

Snap-on MASTER RATCHETS—1/2" SQUARE DRIVE

PATENT NOS. D-132, 891
2,020, 883



Snap-on "Master" Line Features That Give You Most Value For Your Money

- Patented Palm-Grip design handles give a secure hand grip and better appearance.
- You have a choice of four different SNAP-ON "Master" ratchet handles and ratchet adaptor.
- Welch Plugs are used in the friction grip on all handle square drive ends.
- Four way socket grip makes it easier and faster to interchange various units.
- Hot broached chip-curl openings give you smooth strong socket walls.
- High grade alloy steel only is used to produce these SNAP-ON wrenches.
- Controlled heat treating combines surface hardness with skin to core toughness in every part of every tool.
- SNAP-ON guarantee protects you . . . any wrench proving defective in material or workmanship will be replaced.

MASTER RATCHETS (1/2" Square Drive)

SNAP-ON ratchet wrenches are used and preferred by professional mechanics and engineers throughout industry. In every way they are fine examples of the precise engineering, machining, heat treating and finishing that characterizes all SNAP-ON products. The reverse ratcheting mechanisms have proved their unbeatable construction through many years of rugged use. An oiler hole or plug is provided in the head and frequent cleaning and oiling will keep the action working freely. These tools are made of high grade alloy steel, heat treated to give years of service, chrome plated for lasting appearance.

A LR-42 Master Deluxe Ratchet. A 42 tooth ratchet action operating in a round, compact head. This smooth operating action provides the working convenience of a new "bite" with very little handle movement. The head is only 1 1/2" diameter and this feature plus the 42 tooth action permits the operation of this ratchet in tight places where other wrenches cannot be used. The reverse lever is mounted on top for easy operation. Overall length is 9 1/2".

B L-710 Master "Supreme" Ratchet. This tool has a 32 tooth ratchet action for efficient operation where handle swing is limited. 9 1/2" long.

C L-715 Master "Supreme" Ratchet. Same 32 tooth action as the L-710 but having an overall length of 15". Many mechanics prefer this longer ratchet.

D 71M Master Ratchet. An old time favorite with many tool users. Has 20 tooth ratchet action. Pawls, gear drive and plate have gunmetal finish and the handle and head unit is zinc plated. Overall length is 9 1/2".

E 67B Ratchet Adaptor. This ratcheting adaptor converts any combination of handle, extension and socket into a ratcheting tool. Convenient side button reverses action. This unit can be used on many jobs where other "Master" ratchets cannot operate. Also used with 1/2" sq. drive "Torquometers" shown on page 95. 1 1/2" square drive, 2 1/8" overall length, 1 1/8" O.D.



323-M-B MASTER "SUPREME" SET — 23 Most Needed Tools

323-M-B Master Supreme Set. The socket range of 5/16" to 1 1/4" will turn practically any hexagon nut encountered in general servicing operations and the selection of handles and attachments provide turning speed, leverage and reach to take care of any situation. Get rid of worn out knuckle busters and equip now with this fine set of SNAP-ON

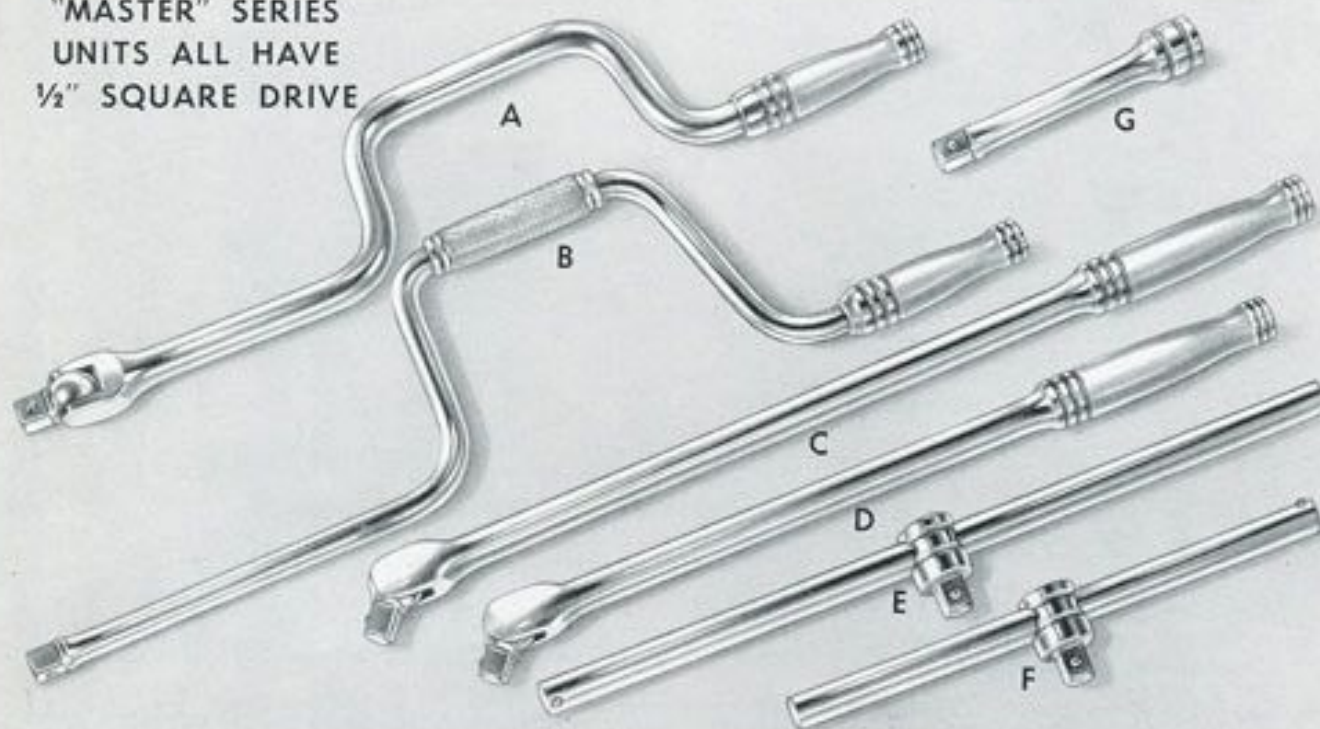
wrenches. Make this set the foundation for a modern and efficient tool outfit. The KR-280B metal case has separate compartments for sockets. A metal handle is fastened to the cover which is secured by sturdy hinges and snap-clip. The case is 20" x 6 1/2" x 3 1/8" high and has red enamel finish.

323-M Set. Above set without case.

| Stock No. | Description |
|-----------|-------------------------------------|
| L-710 | Master Ratchet Wrench 9 1/2" |
| K-4L | Master Nut Speeder 19 1/2" |
| S-15L | Master Sliding Bar 15" |
| NS-18L | Master "Nut Spinner" 18" |
| SX-3 | Master Extension Bar 3 1/2" |
| SX-5 | Master Extension Bar 5" |
| SX-10 | Master Extension Bar 10" |
| UL | Master Universal Joint |
| 315A-SW | Master Set of 13 Double Hex Sockets |
| KR-280B | Metal Box, Red Enamelled Finish |

MASTER HANDLES AND ATTACHMENTS

"MASTER" SERIES
UNITS ALL HAVE
1/2" SQUARE DRIVE



"NUT SPINNER" SPEEDER

A NS-4L "Nut Spinner" Speeder. A speeder, spinner and offset handle, in one. Straighten the hinged head to spin nut down and without taking it off the job, bend into offset position to tighten the nut. Shank length is 6 3/4", overall length 17 1/2". Sweep radius is 2 3/4".

NUT SPEEDER

B K-4L Speeder Handle. The fastest handle to use where nuts are out in the open. Spins them on or off in a hurry. Both handle grips swivel for easy operation. Shank length is 8", overall length 19 1/2", radius of sweep 4 1/4". Chrome plated finish.

SLIDING TEE HANDLES

Sliding Tee Handles. A friction ball in the head snaps into the center groove to make a practical Tee Handle. Head slides to end of bar to form an offset handle. Head 1 1/4" deep. Chrome plated finish.

F S-10L Sliding Bar.....10" long, 5/8" diameter
E S-15L Sliding Bar.....15" long, 5/8" diameter

"NUT SPINNERS"

"Nut Spinners". The hinged socket receiving end allows you to work the tool in any position to clear obstructions and an inner spring holds the head at desired angle for easy placement on the job. Long handles give plenty of leverage for tightening nuts or breaking them loose. Straighten out the hinge and you have a spinner handle. This extremely versatile tool will prove to be a valuable time saver. Chrome plated finish.

(Pat. Nos. 2,196,297; 2,005,202 and D-132,891.)

D NS-15L Nut Spinner.....15" long
C NS-18L Nut Spinner.....18" long
NS-24 Nut Spinner.....24" long

EXTENSION BARS

Extension Bars. Made in eight lengths to give you greatest flexibility of use for your Master tool set. They give you that extra amount of reach that often means the difference between a tough job and an easy job. Full chrome plated and polished.

SX-2 Ext. Bar.....2" long
SX-3 Ext. Bar.....3 1/2" long
SX-5 Ext. Bar.....5" long
SX-10 Ext. Bar.....10" long
SX-20 Ext. Bar.....20" long
SX-24 Ext. Bar.....24" long
SX-30 Ext. Bar.....30" long
SX-36 Ext. Bar.....36" long



ATTACHMENTS FOR MASTER HANDLES (1/2" Square Drive)

A UNIVERSAL JOINT

No. 8L Universal Joint. (Pat. No. 2,196,297.) Fitted with inner spring which holds the joint at any angle for easy application to the job without interfering with the swivel action of the tool in use. 1/2" square drive. 2 1/4" long. 1 1/4" O.D. Extremely compact—short coupled—reaches into those tight places. Chrome plated finish.

B DRAG LINK ADJUSTERS

Made for slotted nuts on steering gear assemblies, drag links and tie rods. 1/2" square drive. 1 1/4" long. The A-26 is for Model "A" Ford and Houdaille shock absorbers.

A-15 Adjuster. 1 1/2" x .150" driving blade tip.
A-17 Adjuster. 2 1/2" x .150" driving blade tip.
A-26 Adjuster. 3/4" x .109" driving blade tip.

C HANDLE ADAPTORS

Interchange 3/8" and 1/2" square drive units with 1/2" drive handles and sockets. Adaptors convert the square drive of the handles as indicated. Chrome plated finish.

★HD-1 Adaptor.....1/2" female—3/8" male
★A-2 Adaptor.....3/8" female—1/2" male
★A-4 Adaptor.....1/2" female—3/8" male
★LA-12 Adaptor.....1/2" female—3/8" male
★LA-62 Adaptor.....3/8" female—1/2" male

D WEATHERHEAD SOCKETS

Designed to fit over and turn those weatherhead copper fittings without damaging them in any way. Enables you to do a fast efficient job. Chrome plated finish.

WH-14 Socket. Fits 1/4" tube fittings.
WH-20H Socket. Fits 3/8" tube fittings.

E HEX HEAD WRENCHES

Hex head socket attachments for use with 1/2" square drive handles. Two piece construction allows individual heat treating of the parts for maximum service life. The bits are held securely in the socket by means of set screws. See page 109 for 3/8" square drive sizes and page 99 for 1/4" square drive sizes.

| Wrench Size | Complete Tool | | Extra Bit only | | Set Screw No. |
|-------------|---------------|--------|----------------|------------|---------------|
| | Stock No. | Length | Stock No. | Bit Length | |
| 3/8" | ★SA-12 | 3 1/2" | ★SA-12-B | 1 1/2" | SA-12-3 |
| 1/2" | ★SA-18 | 3 1/2" | ★SA-18-B | 2 1/4" | SA-18-3 |
| 3/4" | ★SA-18 | 3 1/2" | ★SA-18-B | 2 1/4" | SA-18-3 |

Snap-on MASTER LINE SOCKETS

Precision Machined for accurate



A Deep Hexagon Sockets. Ideal for spark plugs, spring "U" bolts and for nuts set down deeply over bolts . . . extra depth gives you the additional clearance necessary to service them properly. All sizes listed below are double hexagon broached.

| Wrench Size | Stock No. | Bolt Clearance | O. D. Socket End | O. D. Drive End | Length |
|-------------|-----------|----------------|------------------|-----------------|--------|
| 3/4" | S-161 | 25/32" | 1 1/8" | 1 1/8" | 3 1/2" |
| 7/8" | S-181 | 25/32" | 1 3/8" | 1 3/8" | 3 1/2" |
| 1" | S-201 | 25/32" | 1 5/8" | 1 5/8" | 3 1/2" |
| 1 1/8" | S-221 | 25/32" | 1 7/8" | 1 7/8" | 3 1/2" |
| 1 1/4" | S-241 | 25/32" | 2" | 2" | 3 1/2" |
| 1 3/8" | S-261 | 25/32" | 2 1/8" | 2 1/8" | 3 1/2" |
| 1 1/2" | S-281 | 25/32" | 2 1/4" | 2 1/4" | 3 1/2" |
| 1 5/8" | S-301 | 25/32" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/4" | S-321 | 25/32" | 2 1/2" | 2 1/2" | 3 1/2" |
| 1 7/8" | S-341 | 25/32" | 2 5/8" | 2 5/8" | 3 1/2" |
| 2" | S-361 | 25/32" | 3" | 3" | 3 1/2" |

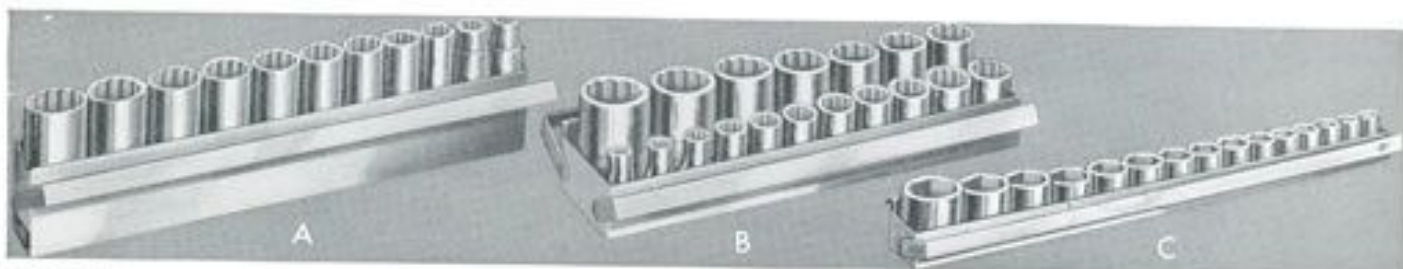
B Double Hexagon Sockets. Double broached, extra thin, straight walled . . . the ideal socket for all-around use.

| Wrench Size | Stock No. | Bolt Clearance | O. D. Socket End | O. D. Drive End | Length |
|-------------|-----------|----------------|------------------|-----------------|--------|
| 3/4" | SW-121 | 25/32" | 1 1/8" | 1 1/8" | 3 1/2" |
| 7/8" | SW-141 | 25/32" | 1 3/8" | 1 3/8" | 3 1/2" |
| 1" | SW-161 | 25/32" | 1 5/8" | 1 5/8" | 3 1/2" |
| 1 1/8" | SW-181 | 25/32" | 1 7/8" | 1 7/8" | 3 1/2" |
| 1 1/4" | SW-191 | 25/32" | 2" | 2" | 3 1/2" |
| 1 3/8" | SW-201 | 25/32" | 2 1/8" | 2 1/8" | 3 1/2" |
| 1 1/2" | SW-221 | 25/32" | 2 1/4" | 2 1/4" | 3 1/2" |
| 1 5/8" | SW-241 | 25/32" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/4" | SW-251 | 25/32" | 2 1/2" | 2 1/2" | 3 1/2" |
| 1 7/8" | SW-261 | 25/32" | 2 5/8" | 2 5/8" | 3 1/2" |
| 2" | SW-281 | 25/32" | 3" | 3" | 3 1/2" |
| 2 1/8" | SW-291 | 25/32" | 3 1/8" | 3 1/8" | 3 1/2" |
| 2 1/4" | SW-301 | 25/32" | 3 1/4" | 3 1/4" | 3 1/2" |
| 2 3/8" | SW-321 | 25/32" | 3 3/8" | 3 3/8" | 3 1/2" |
| 2 1/2" | SW-341 | 25/32" | 3 1/2" | 3 1/2" | 3 1/2" |
| 2 5/8" | SW-361 | 25/32" | 3 5/8" | 3 5/8" | 3 1/2" |
| 3" | SW-381 | 25/32" | 4" | 4" | 3 1/2" |
| 3 1/8" | SW-401 | 25/32" | 4 1/8" | 4 1/8" | 3 1/2" |

*SW-291 is extra heavy for shackle work.

C Single Hexagon Sockets. Single hex gives greater wall contact needed to turn those tightly rusted on or worn nuts and bolts.

| Wrench Size | Stock No. | Bolt Clearance | O. D. Socket End | O. D. Drive End | Length |
|-------------|-----------|----------------|------------------|-----------------|--------|
| 3/4" | TW-121 | 25/32" | 1 1/8" | 1 1/8" | 3 1/2" |
| 7/8" | TW-141 | 25/32" | 1 3/8" | 1 3/8" | 3 1/2" |
| 1" | TW-161 | 25/32" | 1 5/8" | 1 5/8" | 3 1/2" |
| 1 1/8" | TW-181 | 25/32" | 1 7/8" | 1 7/8" | 3 1/2" |
| 1 1/4" | TW-191 | 25/32" | 2" | 2" | 3 1/2" |
| 1 3/8" | TW-201 | 25/32" | 2 1/8" | 2 1/8" | 3 1/2" |
| 1 1/2" | TW-221 | 25/32" | 2 1/4" | 2 1/4" | 3 1/2" |
| 1 5/8" | TW-241 | 25/32" | 2 3/8" | 2 3/8" | 3 1/2" |
| 1 3/4" | TW-251 | 25/32" | 2 1/2" | 2 1/2" | 3 1/2" |
| 1 7/8" | TW-261 | 25/32" | 2 5/8" | 2 5/8" | 3 1/2" |
| 2" | TW-281 | 25/32" | 3" | 3" | 3 1/2" |
| 2 1/8" | TW-301 | 25/32" | 3 1/8" | 3 1/8" | 3 1/2" |
| 2 1/4" | TW-321 | 25/32" | 3 1/4" | 3 1/4" | 3 1/2" |
| 2 3/8" | TW-341 | 25/32" | 3 3/8" | 3 3/8" | 3 1/2" |
| 2 1/2" | TW-361 | 25/32" | 3 1/2" | 3 1/2" | 3 1/2" |
| 2 5/8" | TW-381 | 25/32" | 3 5/8" | 3 5/8" | 3 1/2" |
| 3" | TW-401 | 25/32" | 4" | 4" | 3 1/2" |



A 311A-S-T Deep Hex Socket Set. 11 piece set. All sizes of the deep hex sockets listed above, in KTR-240 metal tray.

311A-S Set. Above set, but tools only.

KTR-240 Metal Tray only.

307A-S Deep Hex Socket Set. 7 piece set. S-201, S-221, S-241, S-261, S-281, S-301 and S-321. No tray.

B 312A-SW-T Double Hex Socket Set. 18 piece set. Contains all sizes SW-121 to SW-401 listed above. Complete with KTR-234 double row metal tray as illustrated.

312A-SW Set. Above set, but tools only.

KTR-234 Metal Tray only.

315A-SW-T Double Hex Socket Set. 15 piece set. Not shown but contains all sizes except SW-121, SW-291 and SW-381, in KTR-215 single row metal tray.

315A-SW Set. Above set, but tools only.

KTR-215 Metal Tray only.

312A-SW-T Double Hex Socket Set. 12 piece set. Not shown but contains SW-141, SW-161, SW-181, SW-191, SW-201, SW-221, SW-241, SW-251, SW-261, SW-281, SW-301 and SW-321, in KTR-235 metal tray.

312A-SW Set. Above set, but tools only.

KTR-235 Metal Tray only.

310A-SW-T Double Hex Socket Set. 10 piece set. Not shown, but contains SW-141, SW-161, SW-181, SW-191, SW-201, SW-221, SW-241, SW-251, SW-261, and SW-281, in KTR-236 metal tray.

310A-SW Set. Above set, but tools only.

KTR-236 Metal Tray only.

C 315A-TW-T Single Hex Socket Set. 15 piece set. TW-141, TW-161, TW-181, TW-191, TW-201, TW-221, TW-241, TW-251, TW-261, TW-281, TW-301, TW-321, TW-341, TW-361 and TW-401. Complete in KTR-215 single row metal tray as illustrated.

315A-TW Set. Above set, but tools only.

KTR-215 Metal Tray only.

with 1/2" SQUARE DRIVE
non-slip fit!



A Double Square Sockets. All have accurately broached, double square openings to allow maximum working convenience where handle movement is limited. Machined from steels famous for their toughness and durability. Get the complete set listed below and have the correct size available when you run into a job requiring the use of a square socket.

| Wrench Size | Stock No. | Bolt Clearance | O. D. Socket End | O. D. Drive End | Length |
|-------------|-----------|----------------|------------------|-----------------|--------|
| 3/8" | SW-412 | 1/16" | 1 1/8" | 1 1/8" | 1 1/2" |
| 1/2" | SW-414 | 1/8" | 1 3/8" | 1 3/8" | 1 1/2" |
| 5/8" | SW-416 | 3/16" | 1 7/8" | 1 7/8" | 1 1/2" |
| 3/4" | SW-418 | 1/4" | 2 1/8" | 2 1/8" | 1 1/2" |
| 7/8" | SW-420 | 5/16" | 2 3/8" | 2 3/8" | 1 1/2" |
| 1 1/8" | SW-422 | 3/8" | 2 7/8" | 2 7/8" | 1 1/2" |
| 1 1/4" | SW-424 | 7/16" | 3 1/8" | 3 1/8" | 1 1/2" |
| 1 3/8" | SW-426 | 1" | 3 3/8" | 3 3/8" | 1 1/2" |
| 1 1/2" | SW-428 | 1 1/8" | 3 7/8" | 3 7/8" | 1 1/2" |
| 1 3/4" | SW-432 | 1 1/4" | 4 1/8" | 4 1/8" | 1 1/2" |

B Hexagon "Flexsockets". An extremely compact, short coupled, single broached, hexagon flexsocket that works freely from a wide angle. Reaches the nuts in tight, cramped quarters that would be impossible to get at and turn with regular sockets, or with any other type of wrench equipment. Its short coupling contributes to easy work in close quarters. Increases the adaptability of your Master handles with the complete series listed below.

| Wrench Size | Stock No. | O. D. Socket End | O. D. Drive End | Length |
|-------------|-----------|------------------|-----------------|--------|
| 3/8" | SU-18 | 1 1/8" | 1 1/8" | 1 1/2" |
| 1/2" | SU-20 | 1 3/8" | 1 3/8" | 1 1/2" |
| 5/8" | SU-22 | 1 7/8" | 1 7/8" | 1 1/2" |
| 3/4" | SU-24 | 2 1/8" | 2 1/8" | 1 1/2" |
| 7/8" | SU-26 | 2 3/8" | 2 3/8" | 1 1/2" |
| 1" | SU-28 | 2 7/8" | 2 7/8" | 1 1/2" |

Superior Features Make **Snap-on** SOCKET WRENCHES YOUR BEST BUY!

Finest Steel. No expense is spared in securing the finest available material. Should metallurgy develop even better steels, SNAP-ON will put them into use.

Continued Research. In laboratories equipped with modern chemical and physical testing equipment, including machines constructed expressly for SNAP-ON and built to our exacting specifications, trained metallurgists conduct continuous research to develop the highest possible quality in our products.

Hot Broaching. Examine a SNAP-ON socket and note the smooth, clean cut wrench corners and walls. This is the result of broaching while the socket is heated and contributes strength as well as accuracy to the tool.

Heat Treatment. Only the most advanced processes are good enough for SNAP-ON tools and furnaces of several types are used to impart the exact necessary degree of hardness, toughness and strength to every part.

Chamfered Openings. All SNAP-ON sockets have a chamfered bevel on the wrench opening to aid in guiding the socket onto the nut.

Thin, Straight Walled Sockets. The use of special alloy steels make possible sockets having incredible strength, yet with thin straight walls that set down over nuts placed extremely close to obstructions. The thin walls permit close control of heat treatment and allow the heat to penetrate thoroughly and evenly. You get greater strength and lighter weight... important factors in every day use.

Size Accuracy. Tolerances are very closely held, each SNAP-ON socket being made a definite number of thousandths larger than the nut it fits. This close tolerance means a snug fit on the nut and prevents rounding it or wearing the socket. Close tolerances of square drive openings and handle drive squares eliminates socket wobble while affording easy interchange of units.

Appearance. SNAP-ON sockets and handles are chromium plated and polished to a lustrous rust resistant finish. They look like quality tools, they have the "feel" of quality—on the job they prove they are quality. Compare them with all others and you'll want SNAP-ON socket wrenches.



A 310A-TW-T Single Hex Socket Set. 10 piece set. Consisting of TW-141, TW-143, TW-181, TW-201, TW-221, TW-241, TW-261, TW-281, TW-301 and TW-321 in KTR-237 metal tray as illustrated. Tools listed on opposite page.

310A-TW Set. Above set, but tools only.
KTR-237 Metal Tray only.

317-TW-T Single Hex Socket Set. 17 piece set. Containing the complete series of TW-type single hexagon sockets shown and listed on page 24. TW-121 to TW-401 inclusive in KTR-234 double row metal tray.

317-TW Set. Above set, but tools only.
KTR-234 Metal Tray only.

B 310A-SQ-T Double Square Socket Set. 10 piece set. Contains the entire range of square sockets listed above, in KTR-239 metal tray.
310A-SQ Set. Above set, but tools only.
KTR-239 Metal Tray only.

C Screw Driver Attachments. Can be used on any master 1/2" square drive handle.

| Screw Size | Complete Tool | | Socket Only | | Screw No. |
|------------|---------------|--------|-------------|-----------|-----------|
| | Stock No. | Length | Stock No. | Stock No. | |
| 1/4"x1/2" | ★SW-284 | 4" | SW-284-1 | ★SW-284-2 | SA-12-3 |
| 1/4"x3/4" | ★SW-324 | 4" | SW-324-1 | ★SW-324-2 | SA-12-3 |
| 3/8"x1/2" | ★SW-405 | 4" | SW-405-1 | ★SW-405-2 | SA-12-3 |

D 306-SU-B Hexagon Flexsocket Set. 6 piece set. Contains all flexsockets listed above, in KR-206 sturdy metal box.
306-SU Set. Above set, but tools only.
KR-206 Metal Box only.

E Semi-Deep Single Hex Sockets
Made with thicker walls and deeper broaching than standard sockets to provide better turning power for "Acorn" nuts and other toughies. Each socket is 2" long and has side hole for locking button.
TW-241-S 3/8" hex opening, Nose O.D. 1 1/8"
TW-261-S 1/2" hex opening, Nose O.D. 1 3/8"
TW-281-S 5/8" hex opening, Nose O.D. 1 7/8"
TW-301-S 3/4" hex opening, Nose O.D. 2 1/8"

Snap-on FERRET TOOLS 3/8" square drive, made



YOU GET ALL THESE
SUPERIOR FEATURES IN

Snap-on

"FERRET" WRENCHES

- Patented design palm-grips on handles
- Choice of 20, 30 or 42 tooth-action ratchets and ratchet adaptor
- Long slim handles for close-in work
- Welch Plug friction-grip construction
- Wide range of socket types and sizes
- 4-way socket grip for faster hook-ups
- Chip-curved hot broached socket walls
- Large variety of special attachments
- High grade alloy steel for strength
- Controlled hardening for long wear

"FERRET" RATCHET WRENCHES

Patent Nos. D-132,891, 2,020,883

Built to give years of trouble-free service. Concealed hardened bearings in the head, special alloy steels, controlled heat treatment and precision machining of all parts, insure a free working ratcheting action. The heads and comfortable "Palm-Grip" handles have a heavy chrome plate finish. Welch plug construction of the locking device makes it easy to replace the spring if necessary.

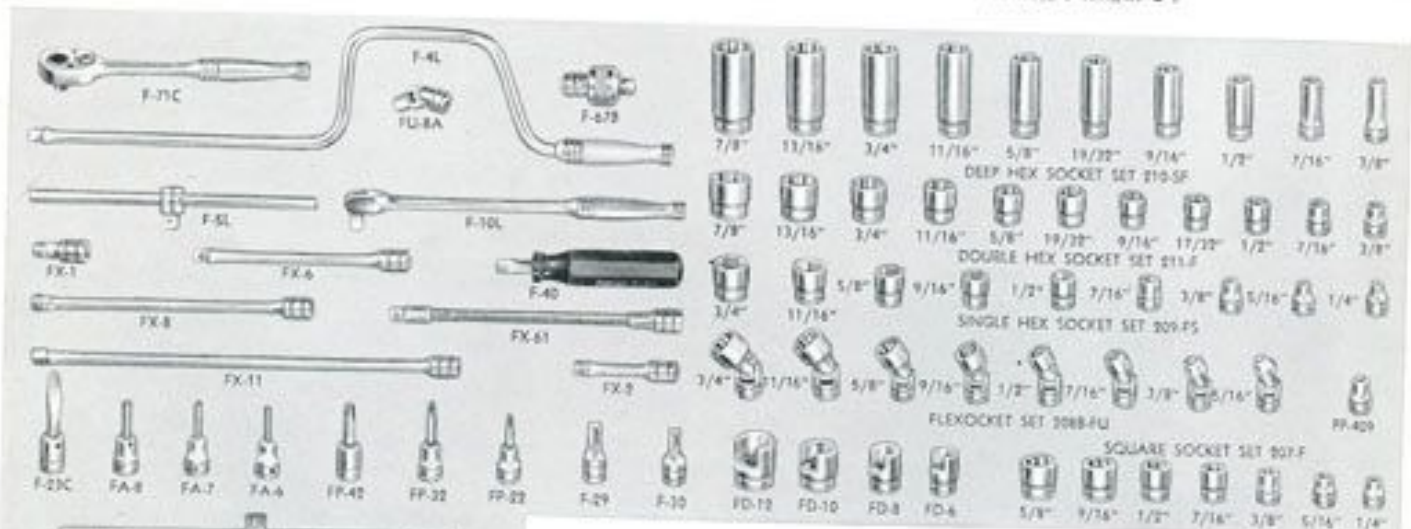
A FR-42 Deluxe "Ferret" Ratchet. This is our finest Ferret ratchet. A dependable pawl-gear mechanism provides forty-two ratchet "bites" around the circle, you get a new "bite" with only a 9° handle movement. Round head allows operation in very close places. Head, bearing plates and pawls are machined from tough alloy steel carefully heat treated to resist wear. Friction grip has neat "Welch Plug" construction. "Palm-Grip" handle, shank and head are full chrome plated. Head diameter is 1 1/2", head depth 7/16", overall length 7 1/2".

B F-71C "Ferret" Ratchet. 30 tooth action allows a new bite every 12° of handle movement. New style pawl engages 2 teeth for extra strength. Tool is heavily chrome plated. . . . ratchet gear has gun metal finish. Head diameter is 1 1/2", head depth 7/16", overall length 7 1/2".

C F-710A "Ferret" Ratchet 20 tooth action. An 18° handle movement gives a new bite. Tool is heavily chrome plated. . . . ratchet gear has gun metal finish. Head diameter is 1 1/2", head depth 7/16", overall length 7 1/2".

D F-70M "Ferret" Ratchet. A fine tool at a lower price. 20 tooth action, zinc plated finish, gun-metal finish on head plate. Friction ball is embossed (not welch plug construction). Hand grip is our "convex-curve" design. Overall length 6 5/8".

E F-67B "Ferret" Ratchet Adaptor. Converts any combination of "Ferret" handle, extension and socket into a reverse action ratcheting tool. . . . provides ratcheting speed on many nut turning jobs where you cannot possibly use a standard type ratchet wrench. Here is a precision built tool that will add tremendously to the usefulness of your Ferret wrenches. Exceptionally useful for work with 3/8" square drive "Torque-meters". (See page 85.) Outside diameter is 1 1/2", length 2".



"FERRET" GENERAL SET — 72 TOOLS

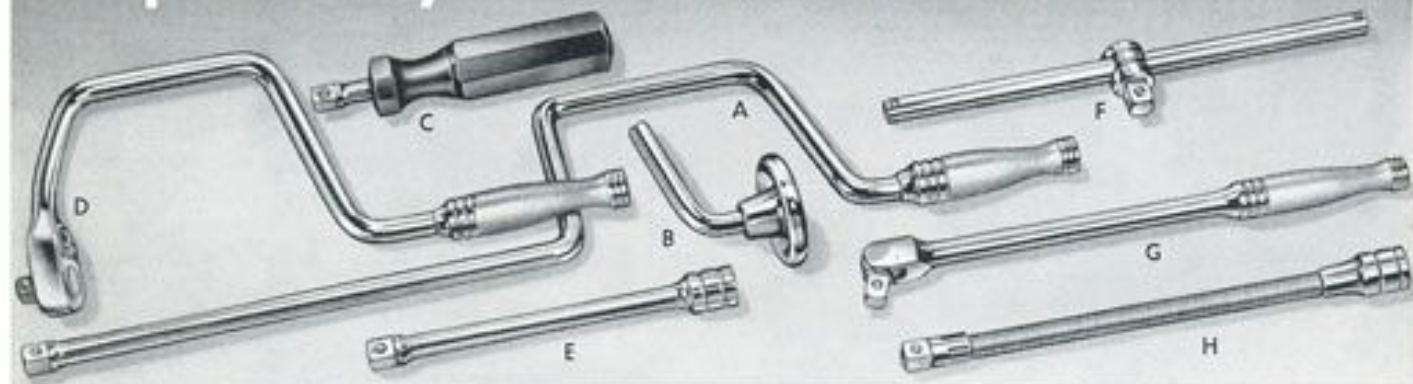
272-F-B "Ferret" General Set. Our most complete "Ferret" Set, carefully selected to handle a majority of servicing requirements. Set also includes the KR-250 Metal Box purposely designed to hold these units. Tote-tray is partitioned to hold sockets.

Handles: F-71C Ratchet; F-67B Ratchet Adaptor; F-5L Sliding Bar; F-4L Speeder; F-16L "Nut Spinner"; F-40 Plastic Grip Handle; FX-1, FX-2, FX-6, FX-8, FX-11 Extension Bars; FX-41 "Flexextension"; and FU-8A Universal Joint.

Sockets: 211-F Double Hex Set; 209-FS Single Hex Set; 210-SF Deep Double Hex Set; 207-F Double Square Set; 208-FU "Flexsocket" Set; FD-6, FD-8, FD-10, FD-12 Weatherhead Sockets; F-23C Screw Driver; FA-6, FA-7, FA-8 Hex Head Wrenches; FP-409 Pipe Plug Socket; FP-32, FP-33, FP-42 Phillips Screw Drivers; F-29, F-30 Clutch-Type Drivers.

272-F "Ferret" General Set. Above set of tools but without the box.

of Special Alloy Steel to last TWICE AS LONG



NEW FERRET HANDLES COMBINE STRENGTH, SLIMNESS, BEAUTY. — 3/8" Sq. Drive

[A] "Ferret" Speeders.* It is impossible to beat a speeder type of wrench handle for fast nut running . . . spins them on or off, fast, with two hand operation. These speeders feature the SNAP-ON "Palm-Grip" handle which rotates to provide easy operation. Three models offer the right length shank for your needs. Radius of the sweep is 3 1/4". *Pat. No. D-132,891

F-4L Speeder. 17 1/2" long. 8 1/2" Shank.
F-4M Speeder. 24 1/2" long. 15" Shank.
F-4N Speeder. 36 1/2" long. 27" Shank.

[B] F-4KL Knob Handle. This is the only type of handle with a radius of 3 1/4" which is 1/2" longer than any other type of handle.

[C] F-40 "Ferret" Plastic Grip Handle. Make your "Ferret" Set more useful with the addition of this shockproof plastic handle. Ideal for electrical work. 5 1/4" long.

[D] RS-4L Ratcheting Speeder. Combines the nut turning speed of a speeder where there is plenty of working space with the convenience of ratcheting action for spots where obstructions prevent much handle movement. The ratchet head has a smooth working 20 tooth action. 18" handle movement gives a new "bite". Tool is chrome plated except for the gun-metal head plate and gear. Radius sweep is 3 1/4", length of tool is 10 1/4".

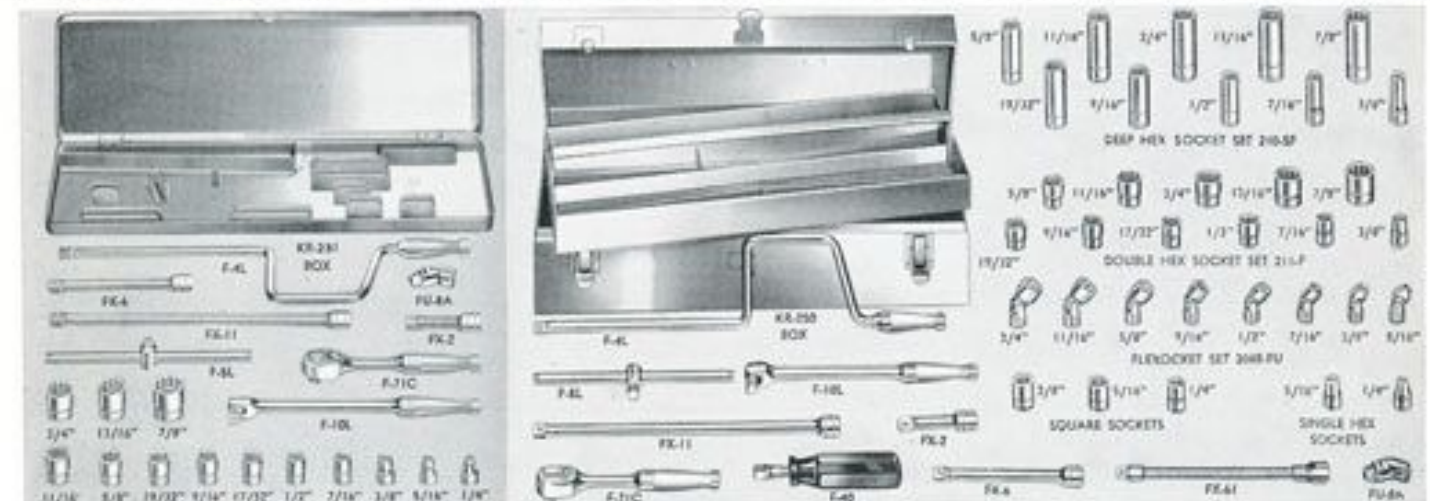
[E] "Ferret" Extension Bars. Lengthen reach of any "Ferret" handle. The advantage of having just the right length extension bar often means getting the job done quicker and with less effort.

FX-1 Extension Bar . . . 1 1/2" Long.
FX-2 Extension Bar . . . 3" Long.
FX-6 Extension Bar . . . 6" Long.
FX-8 Extension Bar . . . 8" Long.
FX-11 Extension Bar . . . 12" Long.
FX-20 Extension Bar . . . 20" Long.

[F] F-5L "Ferret" Sliding Bar. Head slides to any position . . . a friction ball contacts groove in the handle to center the tool as a Tee handle. Handle length 8", diameter 1 1/2", head depth 1 1/4".

[G] F-10L "Ferret" "Nut Spinner".* Plenty of leverage for pulling nuts up tight or for breaking them loose . . . the swivel head is held in a semi-flex condition at any position by means of an inner spring. Length 9 1/4". Head diameter 1 1/4". *Pat. Nos. 2,196,297, 2,005,202 and D-132,891

[H] ★FX-61 "Ferret" "Flexextension". Acts as a flexible drive between wrench handle and socket and provides an easy method of turning nuts in awkward positions . . . works around corners and over obstructions. The tool consists of a 3/4" diameter flexible steel cable with live rubber center shaft fitted securely to male and female square drive socket ends. Length is 8". Not intended for breaking nuts loose or similar tough jobs.



"FERRET" STANDARD SET — 21 Tools

221-F-B "Ferret" Standard Set. This carefully selected assortment provides the basic handle equipment and thirteen sockets needed to handle a majority of nut turning jobs in automotive, aviation, refrigeration, and other service fields. Within its size range, no other set of wrenches can equal it for convenience and dependability. Set includes the specially designed KR-281 Metal Box which measures 19 1/4" x 5 1/2" x 1 1/4".

Handles: F-71C Ratchet; F-4L Speeder; F-5L Sliding Bar; F-10L "Nut Spinner"; FX-2, FX-6, FX-11 Ext. Bars; FU-3A Universal Joint.

Sockets: FS-081, FS-101 Single Hex Sockets and eleven Double Hex Sockets F-121 to F-281.

221-F Ferret Set. Above set but tools only.

"FERRET" UTILITY SET — 44 Tools

244-F-B "Ferret" Utility Set. For greater working convenience and faster servicing, replace old misfit wrenches with this set of 44 matched "Ferret" units. Their precision built, slender handles and sockets were originated by SNAP-ON to squeeze into tight places and service hard-to-reach nuts on intricate machines and engines that defy other types of wrenches. The high grade steels provide amazing degrees of strength in such slender tools. Set includes the KR-250 metal box and tray, box measures 18 1/2" x 6 1/2" x 4 1/2" and has suitcase type handle. Red enamel finish.

Handles: F-71C Ratchet; F-4L Speeder; F-5L Sliding Bar; F-10L "Nut Spinner"; F-40 Plastic Grip Handle; FX-2, FX-6, FX-11 Ext. Bars; FX-61 "Flexextension"; and FU-3A Universal Joint.

Sockets: 211-F Double Hex Socket Set; 210-SF Deep Double Hex Socket Set; FS-081, FS-101, Single Hex Sockets; 208B-FU "Flexsocket" Set; F-308, F-310, F-312 Double Square Sockets.

244-F Ferret Set. Above set but tools only.

FERRET SOCKETS with 3/8" SQUARE DRIVE



Snap-on "FERRET" LINE Offers The Finest Sockets And Attachments It Is Possible To Buy!

• **Longer Range of Sizes.** New sizes have been added to practically every series of "Ferret" sockets and attachments. These sizes, covering a range of 1/4" to 3/4", make the SNAP-ON "Ferret" Line a versatile combination of units.

• **New Socket Design** with beautiful chrome finish gives these tools a smooth, striking appearance... makes them stand out from other tools wherever they are used. They are easy to work with, too, for their thin walls enable them to squeeze into the closest places, yet afford the maximum strength necessary to break loose stubborn nuts and bolts. Larger, easier-to-read markings help you quickly spot the size you need.

• **Seven Socket Wrench Types.** The addition of the deep single hexagon socket series gives you three different styles of broaching in both the standard and extra deep lengths plus the handy "Flexocket" series. Seven different types, 54 different sockets in all.

• **Four Way Socket Grip.** The friction grip hole has been replaced with shallow indentations machined in all four sides of the square drive opening. This allows faster, more convenient interchanging of units as sockets grip securely on any of the four sides.

• **Chip-Curled Broaching.** No more rough bottoms inside the socket to collect dirt and grease. The smoothly rounded bottoming is formed during the hot broaching process to give you the finest in socket construction.

• **Wide Range of Attachments.** You can find a "Ferret" attachment for almost every job you'll run across, in sizes to fit your requirements. All have been redesigned to give you the finest in matched tool equipment.

A DEEP DOUBLE HEX

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|------------|--------|
| | | | Socket End | Handle End | |
| 1/4" | SF-321 | 1 1/2" | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | SF-341 | 1 3/4" | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | SF-361 | 2" | 2" | 2" | 3" |
| 7/16" | SF-381 | 2 1/4" | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | SF-401 | 2 1/2" | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | SF-421 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/4" |
| 5/8" | SF-441 | 3" | 3" | 3" | 4" |
| 11/16" | SF-461 | 3 1/4" | 3 1/4" | 3 1/4" | 4 1/4" |
| 3/4" | SF-481 | 3 1/2" | 3 1/2" | 3 1/2" | 4 1/2" |

B STANDARD DOUBLE HEX

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|------------|--------|
| | | | Socket End | Handle End | |
| 1/4" | F-121 | 1 1/2" | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | F-141 | 1 3/4" | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | F-161 | 2" | 2" | 2" | 3" |
| 7/16" | F-181 | 2 1/4" | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | F-201 | 2 1/2" | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | F-221 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/4" |
| 5/8" | F-241 | 3" | 3" | 3" | 4" |
| 11/16" | F-261 | 3 1/4" | 3 1/4" | 3 1/4" | 4 1/4" |
| 3/4" | F-281 | 3 1/2" | 3 1/2" | 3 1/2" | 4 1/2" |

C STANDARD SINGLE HEX

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|------------|--------|
| | | | Socket End | Handle End | |
| 1/4" | FS-021 | 1 1/2" | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | FS-041 | 1 3/4" | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | FS-061 | 2" | 2" | 2" | 3" |
| 7/16" | FS-081 | 2 1/4" | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | FS-101 | 2 1/2" | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | FS-121 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/4" |
| 5/8" | FS-141 | 3" | 3" | 3" | 4" |
| 11/16" | FS-161 | 3 1/4" | 3 1/4" | 3 1/4" | 4 1/4" |
| 3/4" | FS-181 | 3 1/2" | 3 1/2" | 3 1/2" | 4 1/2" |
| 13/16" | FS-201 | 3 3/4" | 3 3/4" | 3 3/4" | 4 3/4" |
| 7/8" | FS-221 | 4" | 4" | 4" | 5" |
| 15/16" | FS-241 | 4 1/4" | 4 1/4" | 4 1/4" | 5 1/4" |

D DEEP SINGLE HEX

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|------------|--------|
| | | | Socket End | Handle End | |
| 1/4" | SFS-121 | 1 1/2" | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | SFS-141 | 1 3/4" | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | SFS-161 | 2" | 2" | 2" | 3" |
| 7/16" | SFS-181 | 2 1/4" | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | SFS-201 | 2 1/2" | 2 1/2" | 2 1/2" | 3 1/2" |

E STANDARD DOUBLE SQUARE

| Wrench Size | Stock No. | Bolt Clearance Depth | Outside Diameter | | Length |
|-------------|-----------|----------------------|------------------|------------|--------|
| | | | Socket End | Handle End | |
| 1/4" | F-308 | 1 1/2" | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | F-310 | 1 3/4" | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | F-312 | 2" | 2" | 2" | 3" |
| 7/16" | F-314 | 2 1/4" | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | F-316 | 2 1/2" | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | F-318 | 2 3/4" | 2 3/4" | 2 3/4" | 3 3/4" |
| 5/8" | F-320 | 3" | 3" | 3" | 4" |

F SINGLE HEX "FLEXOCKETS"

| Wrench Size | Stock No. | Outside Diameter | | Length |
|-------------|-----------|------------------|------------|--------|
| | | Socket End | Handle End | |
| 1/4" | FS-10A | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | FS-12A | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | FS-14A | 2" | 2" | 3" |
| 7/16" | FS-16A | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | FS-18A | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | FS-20A | 2 3/4" | 2 3/4" | 3 3/4" |

G DOUBLE HEX "FLEXOCKETS"

| Wrench Size | Stock No. | Outside Diameter | | Length |
|-------------|-----------|------------------|------------|--------|
| | | Socket End | Handle End | |
| 1/4" | FD-14A | 1 1/2" | 1 1/2" | 2 1/2" |
| 5/16" | FD-16A | 1 3/4" | 1 3/4" | 2 3/4" |
| 3/8" | FD-18A | 2" | 2" | 3" |
| 7/16" | FD-20A | 2 1/4" | 2 1/4" | 3 1/4" |
| 1/2" | FD-22A | 2 1/2" | 2 1/2" | 3 1/2" |
| 9/16" | FD-24A | 2 3/4" | 2 3/4" | 3 3/4" |



WEATHERHEAD SOCKETS

A Turn Weatherhead copper fittings without damage. All 1 1/4" long except FD-12 which is 1 3/4".
FD-40 Set. One each of following sockets.
FD-6 Socket. Fits 3/16" size.
FD-8 Socket. Fits 1/4" size.
FD-10 Socket. Fits 5/16" size.
FD-12 Socket. Fits 3/8" size.



HANDLE ADAPTORS

B Enable you to interchange Ferret wrenches with Midget and Master units.
★TM-1 Adaptor. Converts 3/8" sq. drive handles to 1/4".
★TA-3 Adaptor. Converts 1/2" sq. drive handles to 3/8".
★A-2 Adaptor. Converts 3/4" sq. drive handles to 1/2".
★A-4 Adaptor. Converts 1 1/2" sq. drive handles to 3/4".



DRAG LINK SOCKET

C F-22A Drag Link Socket. A heavy duty, wide bladed screw driver attachment that will prove ideal for adjusting and tightening slotted nuts on steering gear assemblies, shock absorbers, drag links, etc. Blade is 1 1/2" wide and 3/8" thick. Overall length of tool 1 1/2".



PAN SCREW DRIVER

D ★F-21N Pan Screw Driver. For removing Chevrolet pan screws. A screw driver with spring action collar... holds screw for inserting or locating over grease covered screws and prevents blade from slipping out of slot. Grease is forced out of side slots when pressure is applied.

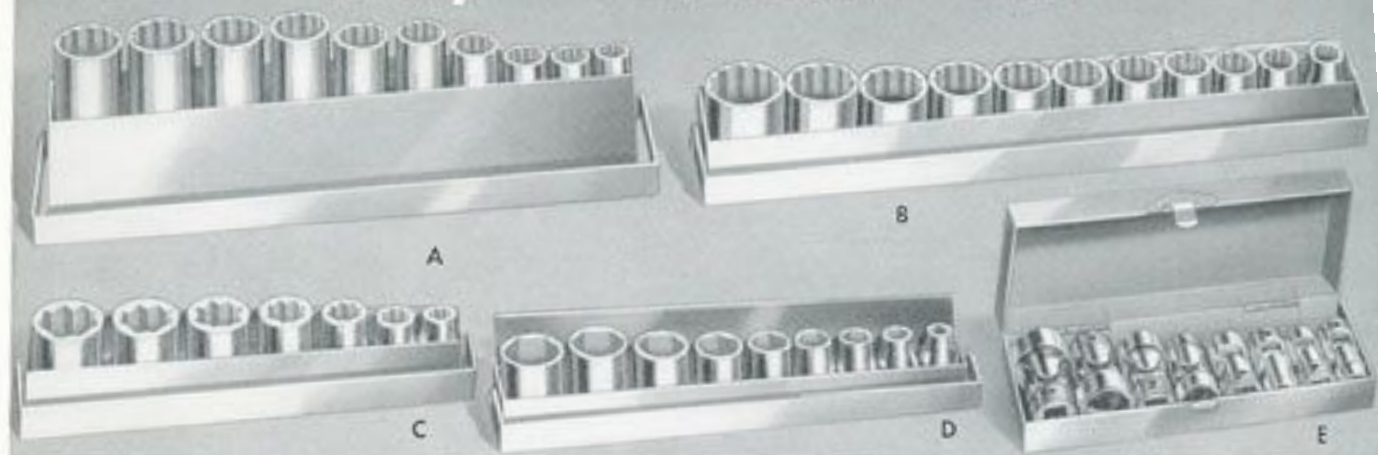


CROWFOOT WRENCHES

E Useful for many jobs.

| Stock No. | Size | Head Depth | Length |
|-----------|-------|------------|--------|
| FCO-14 | 1/4" | 3/8" | 3 1/2" |
| FCO-16 | 5/16" | 7/16" | 3 3/4" |
| FCO-18 | 3/8" | 1" | 4" |
| FCO-20 | 7/16" | 1 1/8" | 4 1/4" |
| FCO-22 | 1/2" | 1 1/4" | 4 1/2" |
| FCO-24 | 5/8" | 1 3/8" | 4 3/4" |
| FCO-26 | 3/4" | 1 5/8" | 5" |
| FCO-28 | 7/8" | 2" | 5 1/4" |

Handy FERRET SOCKET SETS



A 210-SF-T Deep Double Hex Socket Set, 10 piece set. Contains all deep double hex sockets SF-121 to SF-231 listed on opposite page, in KTR-231 metal tray.

B 211-F-T Standard Double Hex Socket Set, 11 piece set. Contains all standard double hex sockets F-121 to F-231 listed on opposite page, complete in KTR-230 metal tray.

C 207-F-T Standard Square Socket Set, 7 piece set. Includes all standard square sockets F-301 to F-320 listed on opposite page, in the KTR-233 metal tray.

D 209-FS-T Standard Single Hex Socket Set. Includes all standard single hex sockets FS-101 to FS-241 listed on opposite page, in the KTR-232 metal tray.

E 208B-FU-B Flexsocket Set, 8 Flexsockets FS-10A, FS-12A, FU-14A, FU-16A, FU-18A, FU-20A, FU-22A and FU-24A, in KR-222 metal box.

206-FS Single Hex Flexsocket Set, 6 piece set. (Not illustrated). Contains Flexsockets FS-10A to FS-20A, No box.

205-SFS Deep Single Hex Socket Set, 5 piece set. (Not illustrated). Contains all deep single hex sockets SFS-121 to SFS-201 listed on opposite page. No tray.



PHILLIPS SCREW DRIVERS AND BITS

A The detachable bits are tempered extremely hard for strength and wearability and are easily and inexpensively replaced when necessary. The FP-41 has a short bit for door handle work.

| Phillips Bit Size | Complete Tool | | Socket Only | | Bit Only | | Screw |
|-------------------|---------------|--------|-------------|--------|-----------|--------|---------|
| | Stock No. | Length | Stock No. | Length | Stock No. | Length | |
| 2 | ★FP-22 | 2 1/4" | FP-22-1 | 1 1/4" | ★MP-22-2A | 1 1/4" | FP-22-3 |
| 3 | ★FP-32 | 2 1/4" | FP-32-1 | 1 1/4" | ★FP-32-2A | 1 1/4" | FP-32-3 |
| 4 | ★FP-41 | 1 1/4" | FP-41-1 | 1 1/4" | ★FP-41-2 | 1 1/4" | FP-42-3 |
| 4 | ★FP-42 | 2 1/4" | FP-42-1 | 1 1/4" | ★FP-42-2A | 1 1/4" | FP-42-3 |

STANDARD SCREW DRIVERS AND BITS

C Hexagon stock blades specially heat treated to give them strength and toughness necessary for long service life.

| Stock No. | Complete Tool | | Socket Only | | Bit Only | | Screw |
|-----------|---------------|--------|-------------|--------|-----------|--------|---------|
| | Tip Size | Length | Stock No. | Length | Stock No. | Length | |
| ★F-23C | 1 1/4" x 1/4" | 3" | F-23C-1 | 1 1/4" | ★F-23C-2 | 2 1/4" | FP-42-3 |
| ★F-25C | 1 1/2" x 1/4" | 3" | F-25C-1 | 1 1/4" | ★F-25C-2 | 2 1/4" | FP-42-3 |
| ★F-31C | 1 1/2" x 1/4" | 2 1/4" | F-31C-1 | 1 1/4" | ★F-31C-2 | 2 1/4" | FP-42-3 |

HEX HEAD SCREW DRIVERS AND BITS

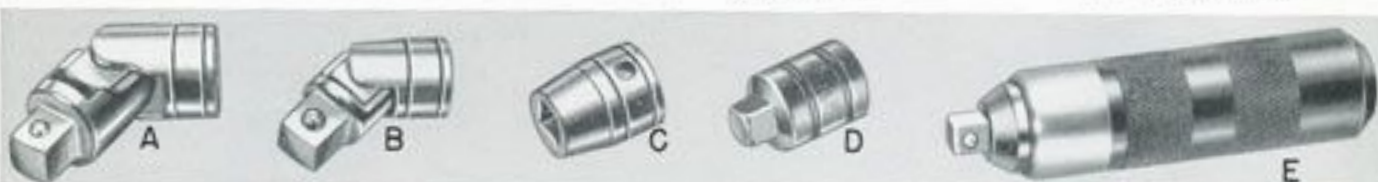
D Detachable bits permit individual heat treatment of parts for greater strength and toughness. If you break a bit you can replace it easily and cheaply without having to buy a complete new tool.

| Wrench Size | Complete Tool | | Socket Only | | Bit Only | | Screw |
|-------------|---------------|--------|-------------|--------|-----------|--------|---------|
| | Stock No. | Length | Stock No. | Length | Stock No. | Length | |
| 1/4" | ★FA-6 | 2 1/4" | FA-6-1 | 1 1/4" | ★FA-6-2 | 1 1/4" | FP-22-3 |
| 1/2" | ★FA-7 | 2 1/4" | FA-7-1 | 1 1/4" | ★FA-7-2 | 1 1/4" | FP-22-3 |
| 3/4" | ★FA-8 | 2 1/4" | FA-8-1 | 1 1/4" | ★FA-8-2 | 1 1/4" | FP-22-3 |
| 1" | ★FA-10 | 2 1/4" | FA-10-1 | 1 1/4" | ★FA-10-2 | 1 1/4" | FP-42-3 |
| 1 1/4" | ★FA-12 | 2 1/4" | FA-12-1 | 1 1/4" | ★FA-12-2 | 1 1/4" | FP-42-3 |

CLUTCH TYPE SCREW DRIVER

E Clutch Type Screw Driver, Ferret socket driver to handle clutch-type screws, also known as "butterfly" or "figure-E" screws, which are becoming increasingly popular for production assembly work of various kinds. This one piece unit is made short to handle work in close quarters. Machined from high quality alloy steel and then carefully heat treated to give exceptional tip strength.

★F-30 Clutch Screw Driver. Bit diameter 1/16", Overall length 1 1/4".



UNIVERSAL JOINTS

Patent No. 2,196,207

Saves a lot of tough work fumbling after those awkward-to-get-at studs and bolts. Tension spring holds tool in a semi-flex state for easy application to the job, 3/4" square drive.

A FU-5A Universal Joint, 3/4" outside diameter, length 1 1/4".

B FU-50A Universal Joint, 1 1/4" outside diameter, length 1 1/4".

PIPE PLUG SOCKETS

These single square sockets are designed for use on the pipe plugs used on many engines. You can get at those fairly inaccessible plugs easily if you add these sockets to your "Ferret" equipment. Overall length 1".

C PP-409 Socket, 3/16" square opening.

D PP-410 Socket, 1/4" square opening.

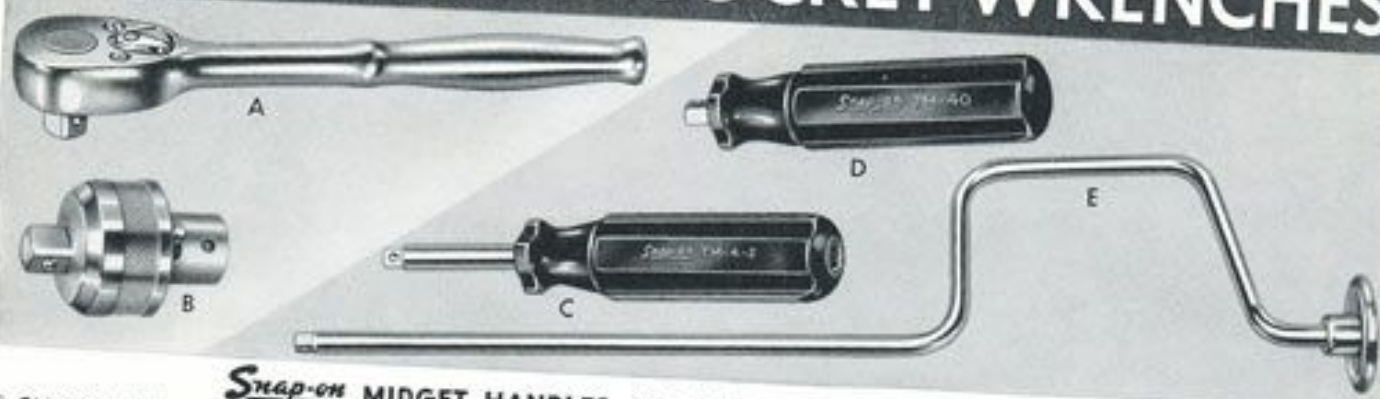
E PP-412 Socket, 3/8" square opening.

D PPM-410 Pipe Plug Socket. This socket has a 3/16" square milled on the end to fit the recessed openings in 3/8" pipe plug fittings. These pipe fittings are being used extensively for drain plugs and a socket of this type makes their removal and installation easier, faster and safer. Overall length is 1 1/4", fits 3/8" square drive "Ferret" handles.

IMPAK DRIVER

E PIT-12 Impek Driver. This practical tool develops great impact power for removing rusted nuts, bolts and screws. It can be used with 3/4" square drive "Ferret" Phillips, Standard, Clutch and Hex Head screwdriver attachments as well as "Ferret" Sockets. In use, the bit or socket is positioned on the job and the end of the Driver struck a sharp blow with a hammer. Instructions are stamped on the tool.

Snap-on MIDGET SOCKET WRENCHES



Snap-on MIDGET HANDLES AND ATTACHMENTS (1/4" Square Drive)

A GM-70M Midget Ratchet Wrench. The finest ratchet ever made in such a small size . . . It reverses by shifting the thumb lever . . . 20 tooth gear allows working in only an 18° arc . . . useful in close places where handle swing is limited. Overall length is only 4 1/16", head thickness is 3/8".

B TM-67 Midget Ratchet Adaptor. Adds reversible ratcheting speed to any Midget handle . . . also useful for work with 1/4" square drive Torquometers (see page 95). Convenient side button reverses the action . . . 20-tooth action gives a new "bite" every 18°. 1 1/4" long, 1 1/8" outside diameter.

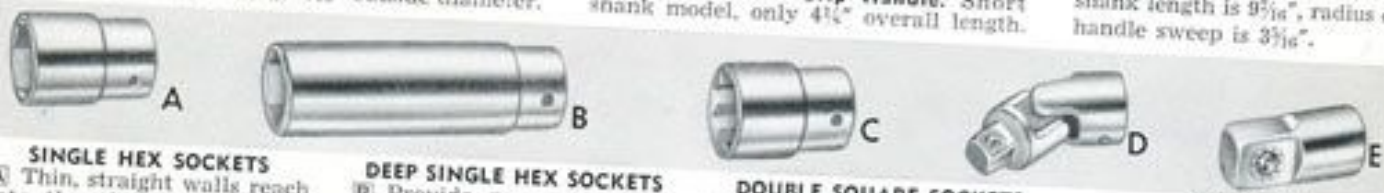
Plastic Grip Handles. Extremely useful, the shock-proof plastic "Octo-Grip" handle provides insulation for work on electrical jobs and gives a firm grip.

C TM-45 Plastic Grip Handle. Has a 1/4" drive end inserted in handle so it can be used as an extension bar. Overall length 5 1/4", shank 2" long.

TM-4 Plastic Grip Handle. Same as TM-45 but without handle drive end hole.

D TM-40 Plastic Grip Handle. Short shank model, only 4 1/4" overall length.

E TMS-4 Midget Speeder. A time saver for aircraft work or anywhere that long reach is needed for breaking loose or firmly setting small nuts and bolts . . . and it spins them on or off in a hurry. Knob handle turns freely for easy operation. Overall length is 16", shank length is 9 5/16", radius of handle sweep is 3 7/16".



SINGLE HEX SOCKETS

A Thin, straight walls reach into the tightest working spaces. Precisely machined.

| Wrench Size | Stock No. | Cleare Bolt | Max. O. D. | L'gth |
|-------------|-----------|-------------|------------|--------|
| 3/16" | TM-6 | 11/16" | 1 1/8" | 1 1/2" |
| 1/4" | TM-7 | 1 1/16" | 1 1/4" | 1 3/4" |
| 5/16" | TM-8 | 1 1/8" | 1 3/8" | 2" |
| 3/8" | TM-9 | 1 1/4" | 1 7/8" | 2 1/4" |
| 7/16" | TM-10 | 1 3/8" | 2 1/8" | 2 3/4" |
| 1/2" | TM-11 | 1 7/8" | 2 3/4" | 3" |
| 9/16" | TM-12 | 2 1/8" | 3 1/8" | 3 1/4" |
| 5/8" | TM-13 | 2 3/8" | 3 3/8" | 3 1/2" |
| 11/16" | TM-14 | 2 7/8" | 3 7/8" | 3 3/4" |
| 1 1/8" | TM-15 | 3 1/8" | 4 1/8" | 4" |

109-TM Set. Above nine sockets.

DEEP SINGLE HEX SOCKETS

B Provide necessary clearance to reach down over protruding bolts . . . thin, straight walls fit in limited spaces.

| Wrench Size | Stock No. | Cleare Bolt | Max. O. D. | L'gth |
|-------------|-----------|-------------|------------|--------|
| 3/16" | STM-6 | 1 1/16" | 1 1/8" | 1 1/2" |
| 1/4" | STM-7 | 1 1/8" | 1 1/4" | 1 3/4" |
| 5/16" | STM-8 | 1 1/4" | 1 3/8" | 2" |
| 3/8" | STM-9 | 1 1/2" | 1 7/8" | 2 1/4" |
| 7/16" | STM-10 | 1 3/4" | 2 1/8" | 2 3/4" |
| 1/2" | STM-11 | 1 7/8" | 2 3/4" | 3" |
| 9/16" | STM-12 | 2 1/8" | 3 1/8" | 3 1/4" |
| 5/8" | STM-13 | 2 3/8" | 3 3/8" | 3 1/2" |
| 11/16" | STM-14 | 2 7/8" | 3 7/8" | 3 3/4" |

108-STM Set. Above eight sockets.

DOUBLE SQUARE SOCKETS

C Double broaching gives you a new grip with only 45° turn . . . saves time when handle movement is restricted. Accurately sized.

| Wrench Size | Stock No. | Cleare Bolt | Max. O. D. | L'gth |
|-------------|-----------|-------------|------------|--------|
| 1/4" | TM-408 | 1 1/8" | 1 1/4" | 1 3/4" |
| 5/16" | TM-410 | 1 1/4" | 1 3/8" | 2" |
| 3/8" | TM-412 | 1 1/2" | 1 7/8" | 2 1/4" |

103-TM Set. Above three sockets.

ADAPTORS

E Permit interchange of 1/4" square drive units with 3/32" and 1/8" square drive handles and sockets.

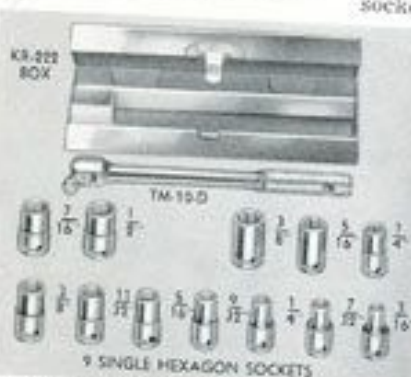
A-6 Adaptor. 3/32" drive female end—1/4" drive male end.

A-8 Adaptor. 1/8" drive female end—3/32" drive male end.

TM-1 Adaptor. 3/8" drive female end—1/2" drive male end.

TA-3 Adaptor. 1/4" drive female end—3/8" drive male end.

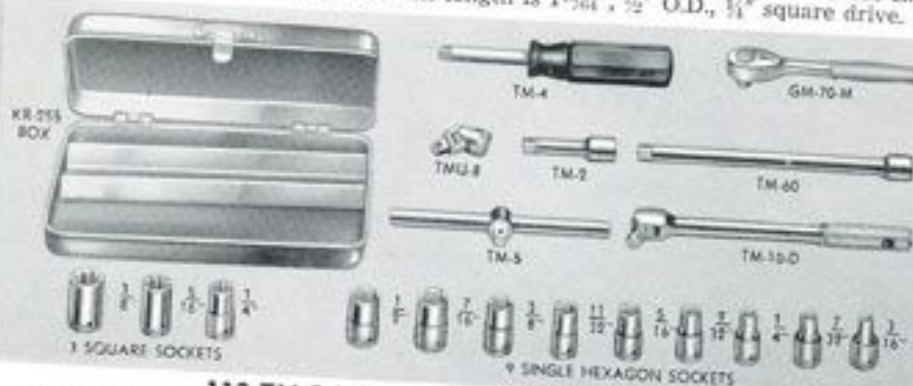
D TMU-8 Universal Joint. One of the biggest time savers you can own . . . works around obstructions to do a fast efficient job. Overall length is 1 1/4", 1/2" O.D., 1/4" square drive.



113-TM-B MIDGET BASIC SET

113-TM-B Midget Basic Set. For the man who wishes to start with the basic units as a good foundation on which to build his complete set. Set consists of TM-10D "Nut Spinner" (see opposite page) and nine standard hexagon sockets and three square sockets listed above, in KR-222 metal box.

113-TM Set. Above set tools only.



119-TM-B MIDGET STANDARD SET—19 Tools

119-TM-B Midget Standard Set. Contains the nineteen most needed Midget wrenches . . . a fine set for workers in any line of business where small nuts or bolts have to be turned. When you have small, nut turning jobs to do lay aside those "too-big" tools and put speed and working convenience into your hands with tools tailored to the job. Set consists of TM-10D "Nut Spinner", TM-2 and TM-60 Extension Bars, TM-5 Sliding Bar, (see opposite page), GM-70M Ratchet, TM-4 Plastic Grip Handle, all listed above. Complete in convenient KR-255 red enameled metal box.

119-TM Midget Set. Above set of Midget tools without the box.

AND SETS WITH 1/4" SQUARE DRIVE



SNAP-ON MIDGET HANDLES AND ATTACHMENTS (1/4" square drive)

A TM-5 Midget Sliding Bar. Combines a tee handle with an offset handle. Sliding head can be used at any position on handle and can be slid back and forth to provide turning room without removing tool from job. Handle length is 4 1/2", head depth is 1 7/16", 1/4" drive.

B TM-10D Midget "Nut Spinner". A handle providing the utmost utility... head is held in a semi-flex condition by a hidden spring and can be used at any position from the handle. Combines a speeder handle for quicker nut-turning and an offset handle for bringing them up tight. Length 6".

*Pat. Nos. 2,196,297 and 2,005,202.

C TM-61 Midget "Flexextension". Made of best 3/16" diameter flexible cable, this addition to your Midget line of tools will help you reach awkward, hard-to-get-at nuts where a solid handle or extension bar cannot possibly be used. Not intended for breaking loose tight nuts, etc. Length 6".

D Midget Extension Bars. Lengthen the reach and increase the adaptability of Midget handles. Three popular sizes give you maximum convenience when working on tiny jobs.

TM-2 Extension Bar.....2" overall length.
TMX-4 Extension Bar.....4" overall length.
TM-60 Extension Bar.....6" overall length.
TM-140 Extension Bar.....14" overall length.



A Midget Clutch-type Screw Drivers. Built short for close-quarter work, these drivers provide the best method of turning clutch-type screws, sometimes called "butterfly" or "figure-8" screws. 1/4" square drive, 1 1/2" long.

★TM-27 Screw Driver. 1 1/4" bit diameter.
★TM-30 Screw Driver. 1 1/4" bit diameter.
★TM-31 Screw Driver. 5/16" bit diameter.

B Windshield Wiper Sockets. These special sockets have oval openings designed to fit oval-head screws used on many windshield wipers.

TM-22A Socket...1 1/2"x1 1/4" oval opening. Overall length of above is 1 7/8".

TM-23 Socket...1 1/2"x1 1/4" oval opening. Overall length of above is 1 7/8".

C Midget Phillips Screw Drivers. On many applications a socket wrench handle and screw driver attachment is preferred to the use of a standard type driver.

★TMP-12 No. 1 Bit Set. Dr. 1 1/2" total length.
★MP-12-2A Extra No. 1 Bit for above. 1 1/4" long.

★TMP-22 No. 2 Bit Set. Dr. 1 1/2" total length.
★MP-22-2A Extra No. 2 Bit for above. 1 1/4" long.

★TMP-23 No. 2 Bit Set. Dr. 3 1/2" total length.
★TMP-23-2 Extra No. 2 Bit for above. 2 1/2" long.

FP-22-3 Allen Set Screw for above.

E TM-82 Short Screw Driver. Can often be used to great advantage where working space is limited. Blade tip is 1/4"x.032" and is replaceable. Overall length 1 1/2".

TM-82-1 Screw Driver Socket only.

★TM-82-2 Screw Driver Bit only.

TM-82-3 Locking Pin only.

C Standard Screw Drivers. Slender, long screw drivers with standard tip. Save time on many jobs where regular drivers would be awkward to use or where extra turning leverage is needed to break screws loose. Each is 3 1/4" long.

★TMC-104 Screw Driver. 5/16"x.032" tip.

TMC-104-1 Socket only.

★TMC-104-2 Extra Bit.

★TMC-105 Screw Driver. 1/4"x.032" tip.

TMC-105-1 Socket only.

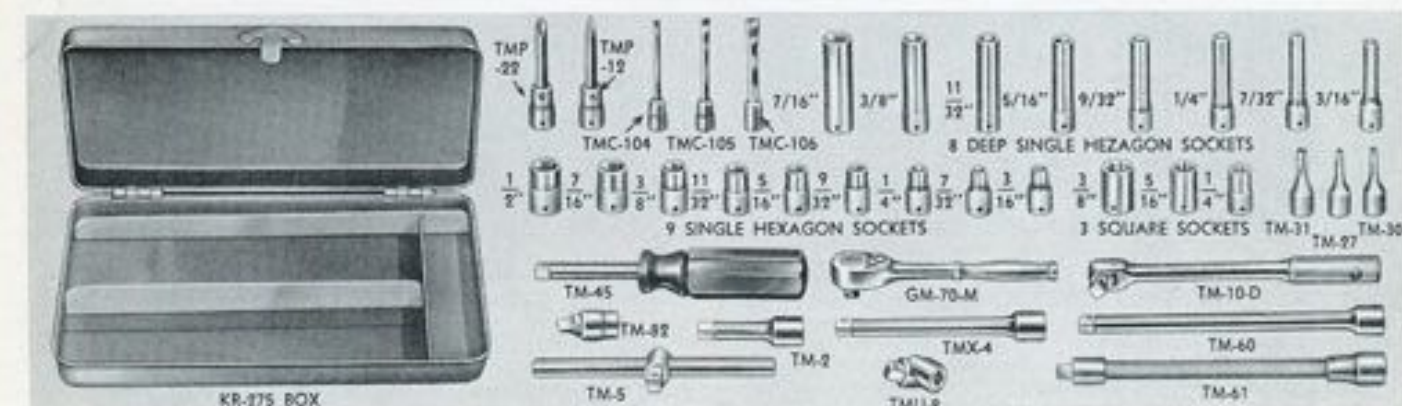
★TMC-105-2 Extra Bit.

★TMC-106 Screw Driver. 3/8"x.042" tip.

TMC-106-1 Socket only.

★TMC-106-2 Extra Bit.

TMC-104-3 Set Screw for above tools.



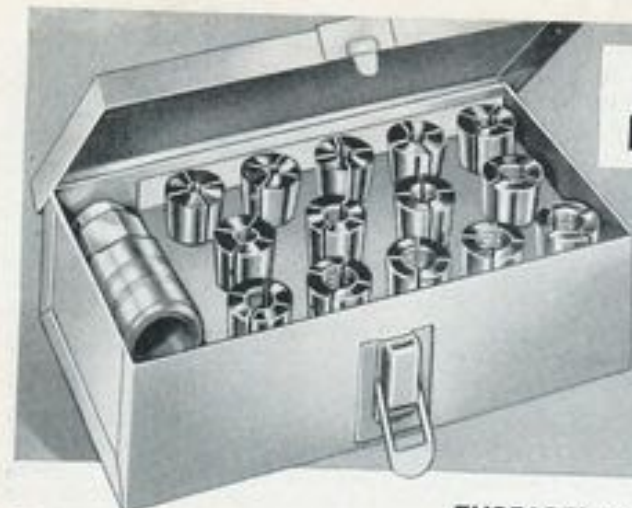
138-TM-B MIDGET UTILITY SET—38 Tools in Convenient Metal Box

138-TM-B Midget Utility Set. Midget handles and sockets together with special screw driving attachments. This is a real utility set of midget wrenches for garage and service station, aircraft instrument assembly and service, and all other businesses where tiny socket wrenches are needed for product assembly or maintenance. Each unit is proportioned and built to high standards of SNAP-ON tool design and quality with wrench openings precision machined to insure accurate fitting to tiny nuts and bolts. Every one of these tools is scientifically heat treated to impart long wearing qualities... polished chromium plate finish.

Set consists of the following tools: GM-70M Ratchet, TM-5 Sliding Bar, TM-10D "Nut Spinner", TM-4S Plastic Grip Handle, TMU-8 Universal Joint, TM-2, TMX-4 and TM-60 Extension Bars, TM-61 "Flexextension", 9 Standard Single Hex Sockets TM-6 to TM-16, 8 Extra Deep Single Hex Sockets, STM-6 to STM-14, 3 Double Square Sockets, TM-408, TM-410 and TM-412, 4 Standard Screw Driver Sockets TM-82, TMC-104, TMC-105 and TMC-106, 2 Phillips Screw Drivers TMP-12 and TMP-22, 3 Clutch-type Screw Drivers TM-27, TM-30 and TM-31. All these in the KR-275 red enameled metal box.

138-TM Midget Set. Above set of tools without the box.

STUD REMOVERS AND RESETTERS—No. 10 to 1½" Range



THREADED COLLET-TYPE STUD PULLERS

These powerful tools are available in three different series to handle studs ranging from No. 10 to 1½" in diameter. The tapered collets thread on the studs and slip into the housing of the unit. Tightening the bolt on top draws the collet into the housing, locking the puller onto the stud with a slip-proof grip. Because this powerful grip does not damage the threads in any way it is possible to reset a stud and use it over again.

STANDARD SIZE PULLER SETS

CG-515-B Complete Set. Contains the CG-500-2 Housing and all collets listed below except CG-500-17 and CG-500-18. Has a size range of ¼" to ¾". Comes complete in sturdy red enameled metal box KR-150 as illustrated above.

CG-515 Set. Above set without the box.

CG-500 Set. Contains the CG-500-2 Housing and the CG-500-8, CG-500-10 and CG-500-12 collets. For use on ⅝"-24, ⅞"-20 and 1"-20 threads.

Standard Puller Parts List

| Size | Stock No. | Description | Size | Stock No. | Description |
|--------|-----------|-------------|----------|-----------|-------------|
| 10-24 | CG-500-2 | Housing | 7/16"-14 | CG-500-9 | Collet |
| 10-32 | CG-500-17 | Collet | 7/16"-20 | CG-500-10 | Collet |
| 1¼"-20 | CG-500-3 | Collet | 7/16"-13 | CG-500-11 | Collet |
| 1¼"-28 | CG-500-4 | Collet | 1½"-20 | CG-500-12 | Collet |
| 1½"-18 | CG-500-5 | Collet | 7/8"-12 | CG-500-13 | Collet |
| 1½"-24 | CG-500-6 | Collet | 7/8"-18 | CG-500-14 | Collet |
| ¾"-16 | CG-500-7 | Collet | ¾"-11 | CG-500-15 | Collet |
| ¾"-24 | CG-500-8 | Collet | ¾"-18 | CG-500-16 | Collet |

LARGE SIZE PULLER SET

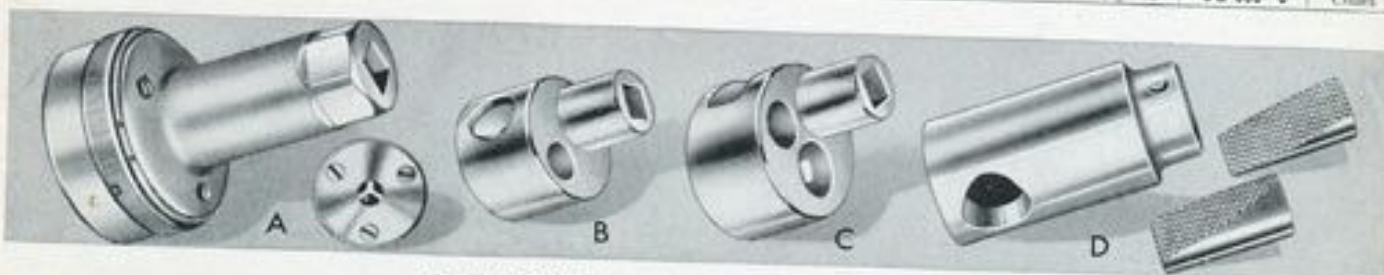
CG-505 Set. Contains the CG-505-1 Housing and the CG-505-2, CG-505-3 and CG-505-4 collets. Handles studs with ¾"-10, 1"-9 and 1½"-8 threads.

Large Puller Parts List

| Size | Stock No. | Description | Size | Stock No. | Description |
|-------|-----------|-------------|---------|-----------|-------------|
| ¾"-10 | CG-505-1 | Housing | 7/8"-14 | CG-505-6 | Collet |
| 1"-9 | CG-505-2 | Collet | 1"-8 | CG-505-4 | Collet |
| 1½"-8 | CG-505-3 | Collet | 1½"-14 | CG-505-7 | Collet |

Extra-large Puller Parts List

| Size | Stock No. | Description | Size | Stock No. | Description |
|--------|-----------|-------------|--------|-----------|-------------|
| 1½"-7 | CG-508 | Housing | 1½"-6 | CG-508-5 | Collet |
| 1½"-8 | CG-508-1 | Collet | 1½"-8 | CG-508-11 | Collet |
| 1½"-12 | CG-508-9 | Collet | 1½"-12 | CG-508-6 | Collet |
| 1½"-12 | CG-508-2 | Collet | 1½"-12 | CG-508-7 | Collet |
| 1½"-7 | CG-508-3 | Collet | 1½"-8 | CG-508-12 | Collet |
| 1½"-8 | CG-508-10 | Collet | 1½"-12 | CG-508-8 | Collet |
| 1½"-12 | CG-508-4 | Collet | | | |



CAM AND WEDGE-TYPE STUD PULLERS

A-80A Stud Puller. Patent No. 2,613,584. A new design stud puller with a capacity of ¼" to ½" ... no collets, wedges, or other parts needed. The three jaws built into the tool automatically close to stud size and grip when pressure is applied ... the harder you pull, the harder they grip. Release the pressure and the jaws release ready for another "bite." This feature gives the A-80A a "built in" ratchet action. Needs only 1" clearance between stud and any obstruction, ½" protrusion of stud provides a good grip, long studs can run through the top opening. Use with ½" square drive handle or 1" wrench.

A-54 Stud Remover. ⅝" to 1½" capacity. Uses two "V" shaped racks which grip the stud as the unit is turned. Use any ½" square drive handle. Powerful grip releases easily when pressure is relieved. Consists of all parts listed below.
*Pat. No. 2,204,852.

A-50 Stud Remover. ⅝" to 1½" capacity. Same unit as above with A-50-3B rack only.

A-50A Housing only
A-50B-1 Driving Gear

A-50-3B Rack ⅝" — 1½" capacity
A-50-4B Rack ⅝" — 1½" capacity

A-36 Stud Remover. ½" to ¾" capacity. Knurled alloy steel wheel grips soft or hardened studs. The driving shank extends through both sides of the housing to provide a bearing surface on each side of the wheel and prevent binding. Use with ½" square drive handle.

A-36A Stud Remover Housing only.

A-36B Stud Remover Driving Shank.

A-36C Stud Remover Gripping Wheel.

LA-55 Heavy Duty Stud Puller. ⅝" to 1" capacity. This puller works on the wedge principle and takes a positive grip which can be released only when the operator turns the tool in reverse direction. The body of the tool is machined from alloy steel. Two sizes of steel wedges are included with the unit. These wedges are heat treated to provide a tough core and extremely hard surface and are cross milled to assure a grip on the hardest studs. Use with any ¾" square drive socket wrench handle.

WRENCH OPENINGS

For American Standard, U.S.S. and S.A.E. Bolts and Nuts

| WRENCH SIZE Also width across flats of Bolts, Screw Heads and Nuts | AMERICAN STANDARD | | | | | | | | U.S. STANDARD | | S.A.E. STANDARD |
|--|--|-------------------|-----------------|--|--|--|--------------|---------------|--------------------------------------|---------------|--|
| | N U T S | | | | B O L T S | | | | National Coarse Bolts and Nuts | Cap Screws | National Fine Bolts, Nuts & Screws |
| | Finished & Finished Thick Series | Regular Series | Heavy Series | Machine Screw Nuts, Stove Bolt Nuts | Regular Series Bolts, Finished Bolts, Hex Head Cap Screws | Heavy Series Bolts and Finished Bolts | Log Bolts | Set Screws | | | |
| 5/32" | — | — | — | 20 & 21 | — | — | — | — | — | — | — |
| 3/16" | — | — | — | 22 & 23 | — | — | — | ±10 | — | — | — |
| 1/4" | — | — | — | 24 | — | — | — | 1/4" | — | — | — |
| 5/16" | — | — | — | 25 & 26 | — | — | ±10 | 5/16" | — | — | — |
| 3/8" | — | — | — | 28 | — | — | — | — | — | — | — |
| 7/16" | — | — | — | ±10 | 1/4" | — | 1/4" | 3/8" | — | — | — |
| 1/2" | 1/4" | 1/4" | — | ±12 & 1/4" | 1/4" | — | — | 3/8" | — | 1/4" | 1/4" |
| 5/8" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | — | 3/8" | 1/2" | 1/4" | 3/8" | 3/8" |
| 3/4" | — | 3/4" | — | 3/4" | — | — | — | — | 3/4" | — | — |
| 7/8" | 3/4" | — | 3/4" | — | 1/2" | — | 1/2" | 3/4" | — | 1/2" | 1/2" |
| 1 1/8" | — | 1/2" | — | — | 3/4" | — | — | — | 3/4" | 3/4" | — |
| 1 1/4" | 3/4" | 3/4" | 1/2" | — | — | 1/2" | — | 3/4" | 1/2" | 3/4" | 3/4" |
| 1 1/2" | — | — | 3/4" | — | 3/4" | — | 3/4" | — | — | — | 3/4" |
| 1 3/4" | — | — | — | — | — | — | — | 1 1/4" | — | 1 1/4" | — |
| 2" | — | — | 3/4" | — | — | 3/4" | — | — | 3/4" | — | 1" |
| 2 1/8" | 1" | 1" | 1" | — | 1" | 1" | 1" | 1 1/2" | — | 1 1/2" | — |
| 2 1/4" | 1 1/4" | 1 1/4" | — | — | 1 1/4" | 1 1/4" | 1 1/4" | — | 1" | — | 1 1/4" |
| 2 1/2" | — | — | 1 1/4" | — | — | — | — | — | — | — | — |
| 2 3/4" | 1 1/2" | 1 1/2" | — | — | 1 1/2" | 1 1/2" | — | — | 1 1/4" | — | 1 1/2" |
| 3" | 1 3/4" | 1 3/4" | 1 1/2" | — | 1 3/4" | 1 3/4" | — | — | 1 1/2" | — | — |
| 3 1/4" | — | — | 1 3/4" | — | — | 1 3/4" | — | — | 1 3/4" | — | — |
| 3 1/2" | 1 3/4" | — | — | — | 1 3/4" | 1 3/4" | — | — | 1 3/4" | — | — |
| 3 3/4" | — | — | 1 3/4" | — | — | — | — | — | 1 3/4" | — | — |
| 4" | 2" | — | — | — | 2" | 2" | — | — | 2" | — | — |
| 4 1/4" | — | — | 2" | — | — | — | — | — | — | — | — |
| 4 1/2" | 2 1/4" | — | 2 1/4" | — | 2 1/4" | 2 1/4" | — | — | 2 1/4" | — | — |
| 4 3/4" | — | — | 2 1/4" | — | — | — | — | — | — | — | — |
| 5" | 2 1/2" | — | — | — | 2 1/2" | 2 1/2" | — | — | 2 1/2" | — | — |
| 5 1/4" | — | — | 2 1/2" | — | — | — | — | — | — | — | — |
| 5 1/2" | 2 3/4" | — | — | — | 2 3/4" | 2 3/4" | — | — | 2 3/4" | — | — |
| 5 3/4" | — | — | 2 3/4" | — | — | — | — | — | — | — | — |
| 6" | 3" | — | 3" | — | 3" | 3" | — | — | 3" | — | — |
| 6 1/4" | — | — | 3" | — | — | — | — | — | 3 1/4" | — | — |
| 6 1/2" | — | — | 3 1/4" | — | 3 1/4" | — | — | — | 3 1/2" | — | — |
| 6 3/4" | — | — | 3 1/2" | — | 3 1/2" | — | — | — | 3 3/4" | — | — |
| 7" | — | — | 3 3/4" | — | 3 3/4" | — | — | — | 4" | — | — |
| 7 1/4" | — | — | 4" | — | 4" | — | — | — | — | — | — |

*Regular Square Only

Note: If you do not know the bolt or nut specification, order wrenches of the same size as the width across the flat of bolt head or nut



Set No. 5146-GS-8. See page 90

****Snap-on Tools***

The Choice of Industrial Tool Users

*"Snap-on" is the trademark of Snap-on Tools Corporation